

### WORK ORDER No. 5 FOR PROFESSIONAL SERVICES

TO: XYGO USA Inc.  
10770 NW 66 Street, Suite 303  
Doral, Florida 33178  
(786) 705-9910

DATE: August 22, 2024

The City of Doral authorized the firm of XYGO USA, Inc. to provide professional services for the provision of creating a 3D Digital Twin Model of the City's right-of-way and features on an as-needed work order basis pursuant to Resolution 23-130 (the "Work"). The Work should be performed in accordance with, and subject to, the terms and conditions contained in the Professional Services Agreement for 3D Digital Twin between XYGO USA, Inc. and the City of Doral dated September 22, 2023 (the "Agreement").

**SCOPE OF SERVICES AND SCHEDULE:**

The scope of the Work will be as described in the Proposal from XYGO USA, Inc. dated July 06, 2023, for the creation of a 3D Digital Twin Model of the City's right-of-Way along Section 22, Section 27, and Section 34, as identified in the attached Road Allocation Map (roads identified in green). The schedule requires the scope of Work to be completed within thirty (30) calendar days after Notice to Proceed (NTP) is provided. All limitations of time set forth in this Work Order are of the essence. The performance of the Work associated with this Work Order will be executed on a line-item basis in a not to exceed the amount of \$13,678.19.

XYGO USA, Inc. is required by the Agreement to begin Work subsequent to the execution of this Work Order, and the issuance of the NTP, or as directed otherwise. If you fail to begin work subsequent to the execution of this Work Order and the issuance of the NTP, the City of Doral will be entitled to disqualify the Proposal and revoke the award.

The Work Order incorporates the terms and conditions set forth in the Agreement dated September 22, 2023, between the parties as though fully set forth herein. In the event that any terms or conditions of this Work Order conflict with the Agreement, the provisions of this specific Work Order shall prevail and apply. The Work Order is not binding until the City of Doral agrees and approves this Work Order.

IN WITNESS WHEREOF, the parties hereto have executed this Work Order on the day and date first above written, in three (3) counterparts, each of which shall, without proof or accounting for the other counterpart, be deemed an original Contract.

CONSULTANT: XYGO USA, Inc.

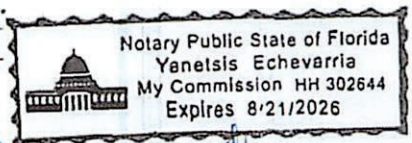
BY: [Signature]  
NAME: Alfredo Escobar  
TITLE: President

OWNER: City of Doral

BY: [Signature]  
NAME: Rey Valdes  
TITLE: City Manager

WITNESSES: SEAL:

- 1. [Signature]
- 2. [Signature]



AUTHENTICATION:  
BY: [Signature]  
NAME: Connie Diaz  
TITLE: City Clerk

APPROVED AS TO FORM AND LEGAL SUFFICIENCY FOR THE SOLE USE OF THE CITY OF DORAL:

BY: [Signature]  
NAME: Lorenzo Cobiella, Esq  
TITLE: Gastesi, Lopez & Mestre, PLLC  
City Attorney

### 3D Digital Twin Model Service

Vendor: XYGO USA Inc.  
 Work Order Num. 5

Survey Area: Section 22, Section 27, Section 34

Item	Qty	Unit	Cost	Amount
Set Up (One Time)	0	EA	\$ 12,000.00	\$ -
Signal Inventory (One Time)	0	EA	\$ 39,250.00	\$ -
Right-of-Way Inspection	24.03	Mile	\$ 475.58	\$ 11,428.19
GIS Analyst	25	Hr.	\$ 90.00	\$ 2,250.00
			<b>TOTAL \$</b>	<b>13,678.19</b>

**RESOLUTION No. 23-130**

**A RESOLUTION OF THE MAYOR AND THE CITY COUNCIL OF THE CITY OF DORAL, FLORIDA, APPROVING A PROFESSIONAL SERVICES AGREEMENT WITH XYGO USA CORP., IN AN AMOUNT NOT TO EXCEED \$100,000.00, FOR THE ESTABLISHMENT OF A ONE (1) YEAR PILOT PROGRAM TO PROVIDE A 3D DIGITAL TWIN MODEL OF THE CITY'S PUBLIC RIGHT-OF-WAY WHICH WILL ALLOW THE PUBLIC WORKS DEPARTMENT TO DIGITALLY IDENTIFY, ANALYZE, AND MANAGE RIGHT-OF-WAY ANOMALIES; AUTHORIZING THE CITY MANAGER TO TRANSFER \$100,000.00 FROM ACCOUNT No. 001.80005.500633 TO ACCOUNT No. 001.80005.500340 TO PROVIDE SUFFICIENT FUNDING FOR THIS REQUEST; PROVIDING FOR IMPLEMENTATION; AND PROVIDING FOR AN EFFECTIVE DATE**

**WHEREAS**, the Public Works Department ("PWD") is continuously looking for ways to improve services, efficiency and proactiveness to provide the best possible level of service to the City of Doral ("City"); and

**WHEREAS**, in December 2021, XYGO USA, Inc. ("XYGO"), approached PWD to offer their services for a complete 3D digital twin survey package that would allow for the detection, quantification, and measurements of right-of-way anomalies through a Digital Twin – Point Cloud Analysis, which can provide measurements of up to 2 cm of accuracy; and

**WHEREAS**, the digital twin model is created through a survey performed with lidar sensors, 360 degrees high resolution images, and a digital twin platform for its detection and analysis; and

**WHEREAS**, these services allow for an automated survey and analysis of public rights-of-way and the creation of a GIS based 3D model of the environment through Lidar technology; and

**WHEREAS**, the data and information acquired by the XYGO technology is used for the issuance of work orders through the XYGO system that helps organize, schedule, track, budget and ultimately address/correct the identified anomalies; and

**WHEREAS**, XYGO was identified by the PWD as the desired provider for a 3D Digital Twin Pilot Program on the basis of the company's unique experience and capacity, and their ability to implement the service in a short time frame; and

**WHEREAS**, pursuant to Section 2-323(12) of the City's Code of Ordinances, sole source purchases are exempt from the City's competitive procurement procedures when the city manager or purchasing agent determines in writing, after conducting a good faith review of available sources, that there is only one source for the required supply, brand, service, or construction item capable of fulfilling the needs of the City; and

**WHEREAS**, XYGO was determined to be a sole source provider of the services as set forth in Section 2-323(12) of the City's Code of Ordinances; and

**WHEREAS**, the services provided by XYGO were vetted through multiple City departments, including PWD, the IT Department, and the Procurement Division, and included a long analysis, including a review of final product samples demonstrating XYGO's capacity; and

**WHEREAS**, based on the above, the PWD requested a proposal from XYGO to implement a pilot program for the services mentioned; and

**WHEREAS**, the PWD and XYGO negotiated a proposal to provide the services on an as-needed work order basis at a rate of \$465.58 per center-line mile in a total amount not to exceed \$100,000.00, which includes a one-time setup fee of \$12,000.00, and a one-time fee of \$39,250.00 to create a Citywide signal inventory; and

**WHEREAS**, the proposed survey and analysis will be performed on a work order basis so that the City can identify anomalies in a given section of right-of-way, and the City and address/correct those anomalies first before surveying the next section; and

**WHEREAS**, City staff respectfully requests that the Mayor and the City Councilmembers approve a Professional Services Agreement with XYGO for a one (1) year pilot program to provide a 3D digital twin model of the City's right-of-way which will allow PWD to digitally identify, analyze, and manage right-of-way anomalies in an amount not to exceed \$100,000.00; and

**WHEREAS**, in addition, City staff respectfully requests authorization for the City Manager to transfer \$100,000.00 from the Public Works Department Fund – "Improvement Street" Account, Account Num. 001.80005.500633, to the Public Works Department Fund – "Contractual Services – Other" Account, Account Num. 001.80005.500340, to provide sufficient funding for this request.

**NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND THE CITY COUNCIL OF THE CITY OF DORAL AS FOLLOWS:**

**Section 1. Recitals.** The above recitals are confirmed, adopted, and incorporated herein and made part hereof by this reference.

**Section 2. Approval.** The Professional Services Agreement between the City of Doral and XYGO USA, Inc., in an amount not to exceed \$100,000.00, in substantially the form attached hereto as Exhibit "A", and the transfer of \$100,000.00 from the Public Works Department Fund – "Improvement Street" Account, Account Num. 001.80005.500633, to the Public Works Department Fund – "Contractual Services – Other" Account, Account Num. 001.80005.500340, to provide sufficient funding for this request, are hereby approved.

**Section 3. Authorization.** The City Manager is authorized to execute a Professional Services Agreement with XYGO USA, Inc., in an amount not to exceed \$100,000.00, subject to approval by the City Attorney as to form and legal sufficiency. The City Manager is further authorized to transfer \$100,000.00 from Account Num. 001.80005.500633 to Account Num. 001.80005.500340 to provide sufficient funding for the services.

**Section 4. Implementation.** The City Manager and the City Attorney are hereby authorized to take such further action as may be necessary to implement the purpose and the provisions of this Resolution.

**Section 5. Effective Date.** This Resolution shall take effect immediately upon adoption.

The foregoing Resolution was offered by Vice Mayor Pineyro who moved its adoption.

The motion was seconded by Councilmember Porras and upon being put to a vote, the vote was as follows:

Mayor Christi Fraga	Yes
Vice Mayor Rafael Pineyro	Yes
Councilwoman Digna Cabral	Yes
Councilwoman Maureen Porras	Yes
Councilman Oscar Puig-Corve	Yes

PASSED AND ADOPTED this 9 day of August, 2023.



CHRISTI FRAGA, MAYOR

ATTEST:



CONNIE DIAZ, MMC  
CITY CLERK

APPROVED AS TO FORM AND LEGAL SUFFICIENCY  
FOR THE USE AND RELIANCE OF THE CITY OF DORAL ONLY:



VALERIE VICENTE, ESQ. for  
NABORS, GIBLIN & NICKERSON, P.A.  
CITY ATTORNEY