

DATE SUBMITTED 4/14/2020
 SUBMITTED BY COMMUNITY DEVELOPMENT DIRECTOR
 DATE ACTION REQUIRED 4/21/2021

COUNCIL ACTION (X)
 PUBLIC HEARING REQUIRED ()
 RESOLUTION ()
 ORDINANCE 1ST READING ()
 ORDINANCE 2ND READING ()
 CITY CLERK'S INITIALS [Signature]

**IMPERIAL CITY COUNCIL
 AGENDA ITEM**

SUBJECT: DISCUSSION/ACTION: TRAFFIC CONCERNS AT THE INTERSECTION OF MARSHALL AVENUE AND CROWN COURT 1. Placement of new 3-way stop signs at the intersection of Marshall Avenue and Crown Court	
DEPARTMENT INVOLVED:	COMMUNITY DEVELOPMENT
BACKGROUND/SUMMARY: The City of Imperial has received various concerns regarding traffic, speeding, and visibility surrounding business owners, at this intersection. The ideal mitigation for the business owners, is the placement of a three-way stop. Crown Court and Marshall Avenue are uncontrolled. Sidewalks are not provided at all approaches to the intersection, there are no mark crosswalks, and there are no parking restrictions at the approaches of the intersection. On July 8, 2020, the Traffic Commission recommended a 3 way stop to mitigate the concern. Staff designed the three way stop at this intersection and revealed conflicts with the existing driveway configuration (See Exhibit A). Following the State and City Guideless, the proposed stop sign will be located in the middle of the driveway. Staff also designed three new proposals that shows the intended strategy of mitigation measures for the Commission to review (See Exhibit "B", "C" and "D"). On March 24, 2021, the Traffic Commission reviewed these options and recommended a red curb as per Exhibit "C" with a modified 100' Red Curb on the South East location along Marshall Avenue. Please attached staff report for additional details. The potential funding sources are General Fund, Local Transportation, LTA Measure "D".	
FISCAL IMPACT: Please see mitigation measures costs outlined within the staff report	ADMIN SERVICES SIGN INITIALS _____
RECOMMENDATION: Traffic Commission recommended a red curb as per Exhibit "C" with a modified 100' Red Curb on the South East location along Marshall Avenue.	DEPT. INITIALS <u>OM</u>
MANAGER'S RECOMMENDATION: <i>approve red curb</i>	CITY MANAGER'S INITIALS <u>OTM</u>
MOTION: SECONDED: APPROVED () REJECTED () AYES: DISAPPROVE () DEFERRED () NAYES: ABSENT: REFERRED TO:	



Staff Report

Agenda Item No.

To: City of Imperial City Council

From: Othon Mora, Community Development Director

Date: April 14, 2021

Subject: Proposed placement of new 3-way stop signs @ the intersection of Marshall Avenue and Crown Court.

Background:

The City of Imperial has received various concerns regarding traffic, speeding, and visibility surrounding business owners, at this intersection. The ideal mitigation for the business owners, is the placement of a three-way stop.

Crown Court and Marshall Avenue are uncontrolled. Sidewalks are not provided at all approaches to the intersection, there are no mark crosswalks, and there are no parking restrictions at the approaches of the intersection. On July 8, 2020, the Traffic Commission recommended a 3 way stop to mitigate the concern. Staff designed the three way stop at this intersection and revealed conflicts with the existing driveway configuration (See Exhibit A). Following the State and City Guideless, the proposed stop sign will be located in the middle of the driveway. Staff also designed three new proposals that shows the intended strategy of mitigation measures for the Commission to review (See Exhibit "B", "C" and "D"). On March 24, 2021, the Traffic Commission reviewed these options and recommended a red curb as per Exhibit "C" with a modified 100' Red Curb on the South East location along Marshall Avenue.

Analysis:

The Development Review Committee has assessed the area in regards to the placement of a three-way stop at the intersections of Marshall Avenue and Crown Court.

The following Development Review Committee members reviewed the item:

- Assistant City Manager, Alexis Brown
- Public Services Director, Jackie Loper

- Parks Superintendent, Tony Lopez
- Imperial County Fire Representative, Andrew Loper
- Community Development Director, Othon Mora
- Community Services Director, Ember Haller
- Imperial Police Chief, Leonard Barra
- Planner, Lisa Tylenda

Based on the concerns expressed by business owners, the placement of a three-way stop may provide and fulfill the sought-after traffic safety mitigation. The Development Review Committee (DRC) has based the recommendation on the following guidelines from the “Manual on Uniform Traffic Control Devices (MUTCD)” as follows:

Section 2B.04, “Right of Way at Intersections”, of the CA-MUTCD states that “In addition, the use of YIELD or STOP signs should be considered at the intersection of two minor streets or local roads where the intersection has more than three approaches and where one or more of the following conditions exist:

- The combined vehicular, bicycle, and pedestrian volume entering the intersection from all approaches average more than 2,000 units per day
- The ability to see conflicting traffic on an approach is not sufficient to allow a road user to stop or yield in compliance with the normal right-of-way rule if such stopping or yielding is necessary
- Crash records indicate that five or more crashes that involve the failure to yield the right-of-way at the intersection under the normal right-of-way rule have been reported within a 3-year period, or that three or more such crashes have been reported within a 2-year period
- Section 2B.07, “Multi-way Stop Application”, of the CA-MUTCD stipulates that multi way stops to be considered as an option on “Locations where a road user, after stopping, cannot see conflicting traffic and is not able to negotiate the intersection unless conflicting cross traffic is also required to stop.”
- YIELD or STOP signs should not be used for speed control.

Staff’s findings are as follows:

- The CA-MUTCD defines minimum requirements for traffic volumes, pedestrian volumes, and bicycle volumes to warrant an all-way stop controlled intersection. Based on field observations, the intersection of Crown Court and Marshall Avenue would not meet these minimum volume requirements. Currently, there is not a recent traffic study available for the area.

- Utilizing the Statewide Incident Traffic Reporting System and the City's database, a review of the collision history at the intersection was conducted for a three-year period. Reports show that there have been 0 collisions in the area.
- Based on field observations, there is limited "visibility" challenge at the intersection for drivers "stopping" on Crown Court going west and try to turn in either direction due to cars parking on Marshall Avenue.

Other Mitigation Measures Options and Cost:

3 Way Stop Sign \$6,348.00

RRPF (Rectangular Rapid Flashing Beacons) Pedestrian Crosswalk Systems \$17,732

Asphalt Speed Bumps \$12,000.00

Asphalt Speed Humps \$15,000.00

Rubber Speed Bumps \$2,000.00

Rubber Speed Humps \$2,250.00

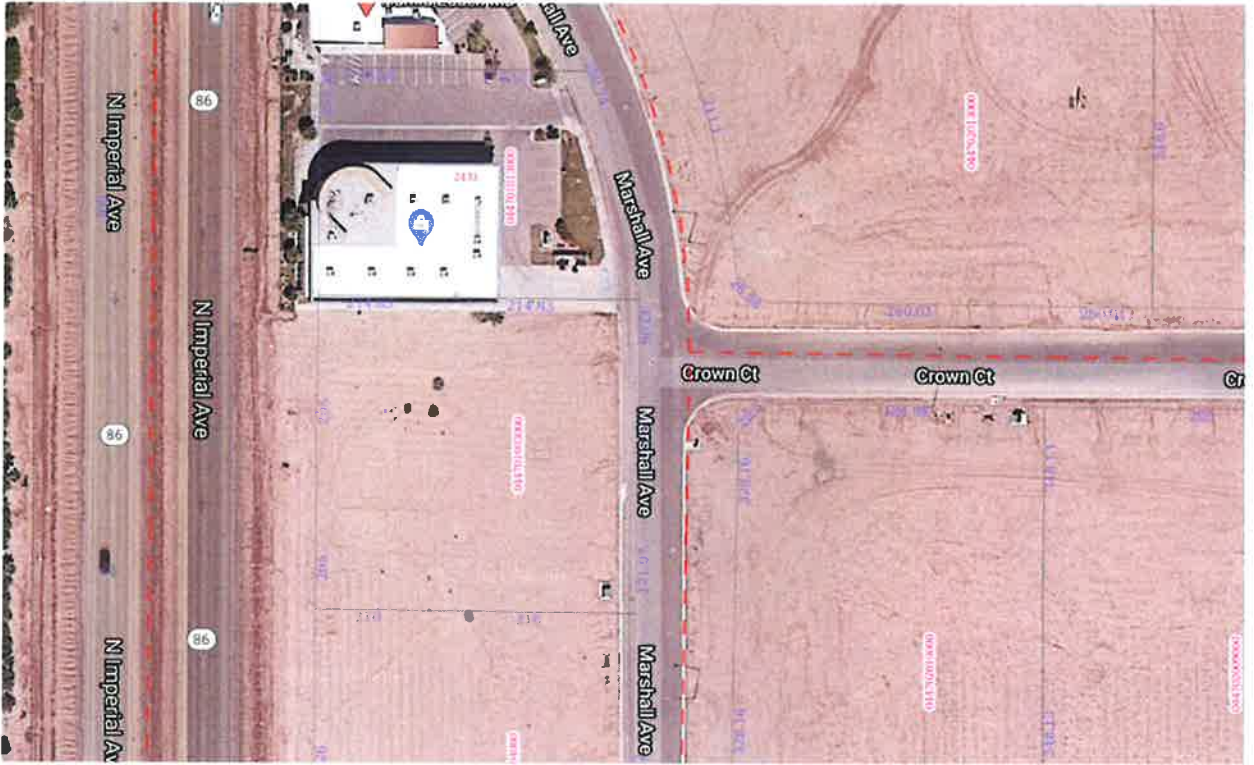
Speed Radar Signs \$29,500.00

3 Modified Way Stop Sign \$7,148.00

Staff Recommendation:

Based on these findings, staff recommend installation of a three-way stop sign at Crown Court and Marshall Avenue or a single stop on Crown court with at least 50' red curb marking along Marshall Avenue.

Location Map:



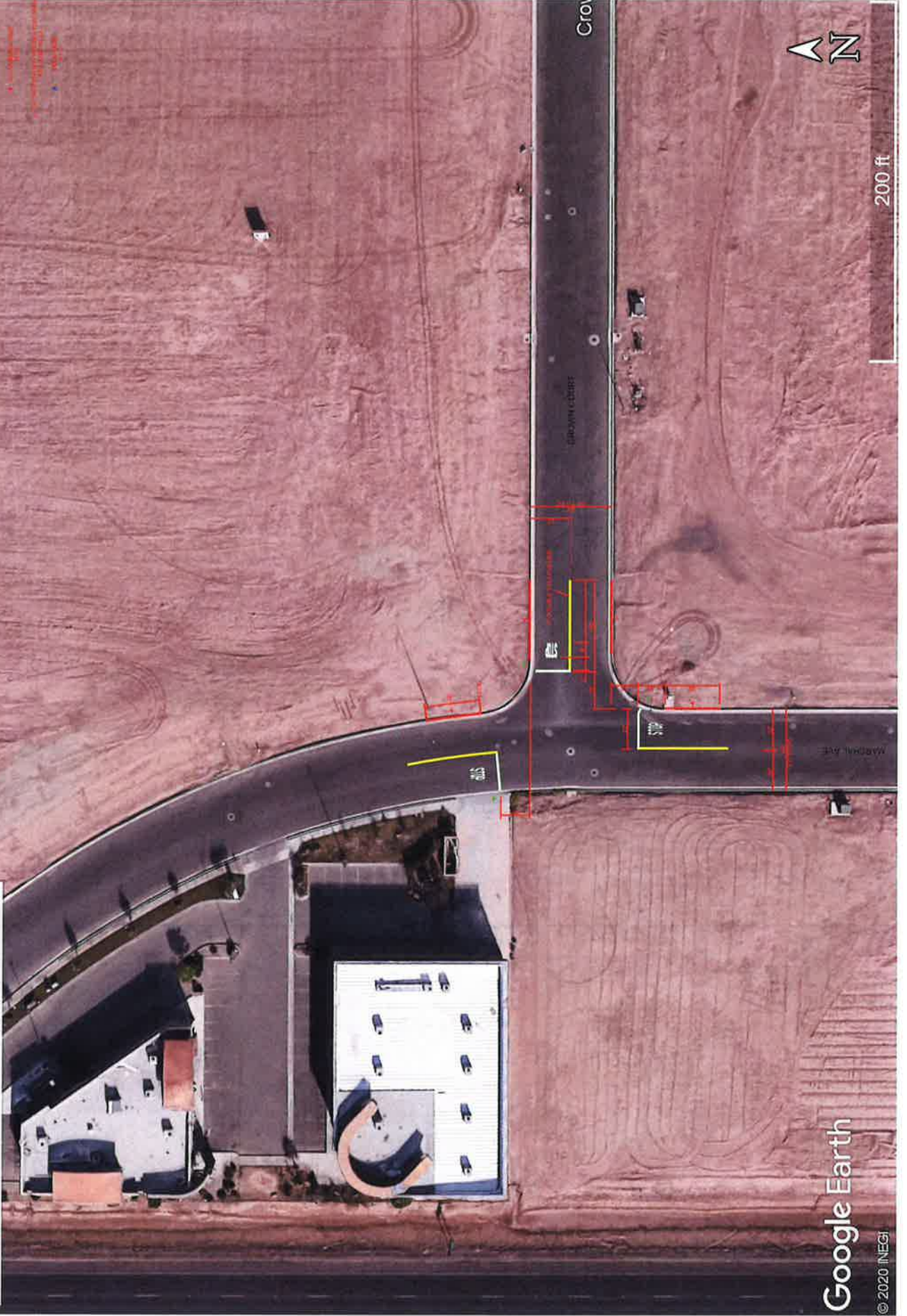
Marshall Ave. & Crown Ct.

3 Way Stop

EXHIBIT "A"

Legend

- Proposed Right-of-Way
- Proposed Pavement
- Proposed Utility
- Proposed Signage
- Proposed Street Light

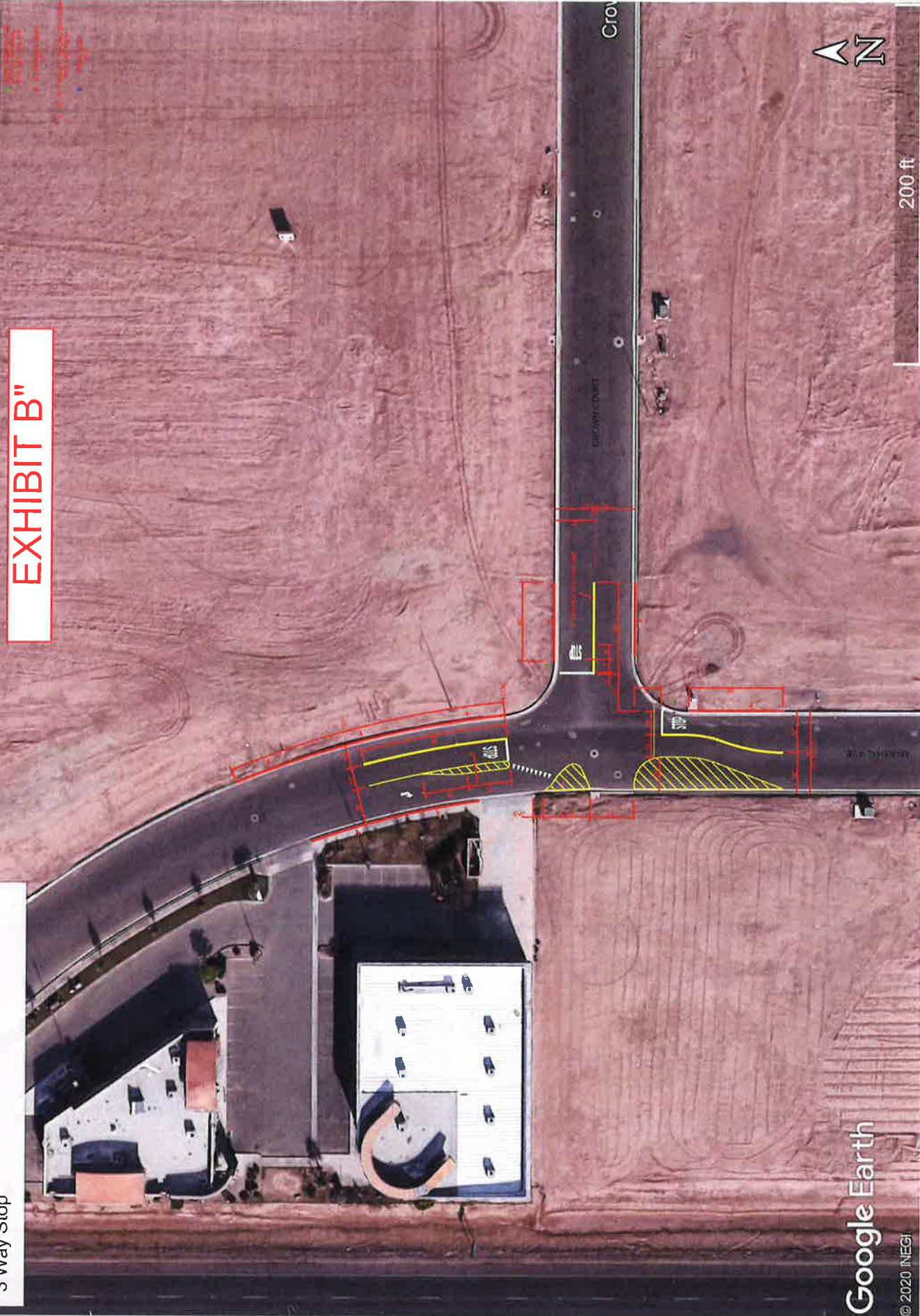


Marshall Ave. & Crown Ct.

3 Way Stop

EXHIBIT B"

Legend



Marshall Ave. & Crown Ct.

3 Way Stop

EXHIBIT "C"

Legend

- Proposed Right-of-Way
- Proposed Pavement
- Proposed Sidewalk
- Proposed Stormwater



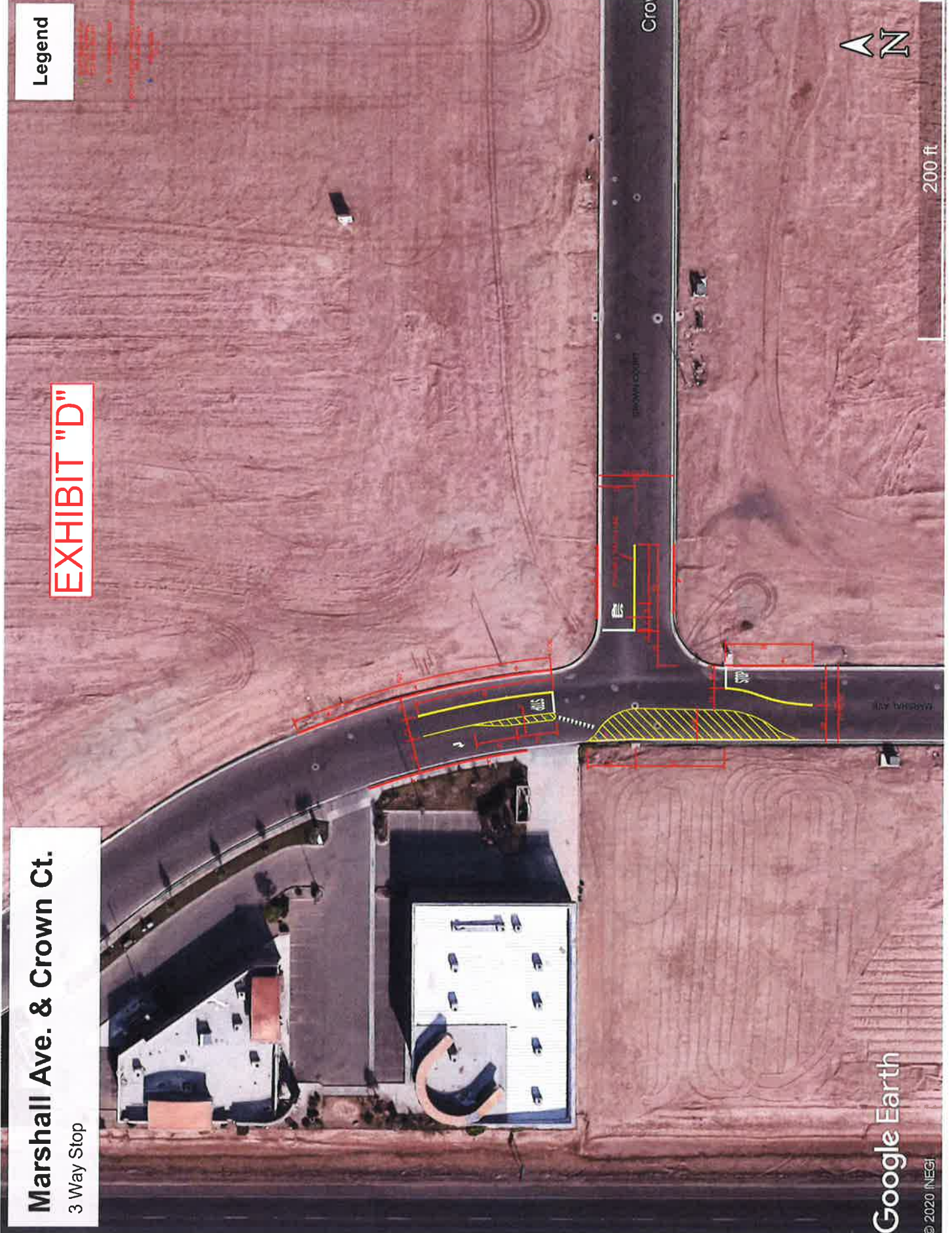
Marshall Ave. & Crown Ct.

3 Way Stop

EXHIBIT "D"

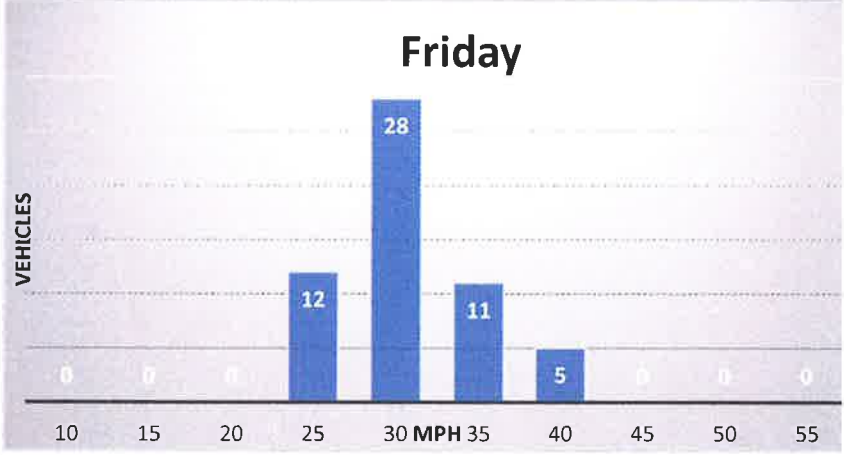
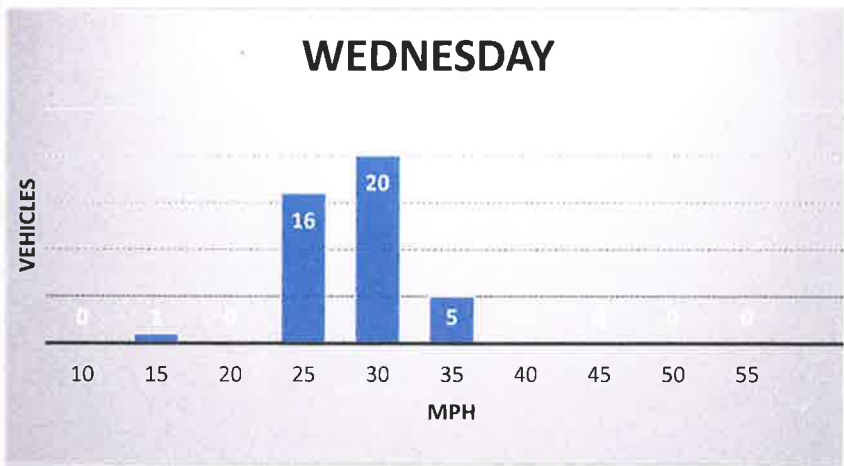
Legend

- Proposed Right-of-Way
- Proposed Pavement
- Proposed Curb
- Proposed Sidewalk
- Proposed Street Light
- Proposed Sign
- Proposed Stop Sign
- Proposed Stop Sign
- Proposed Stop Sign



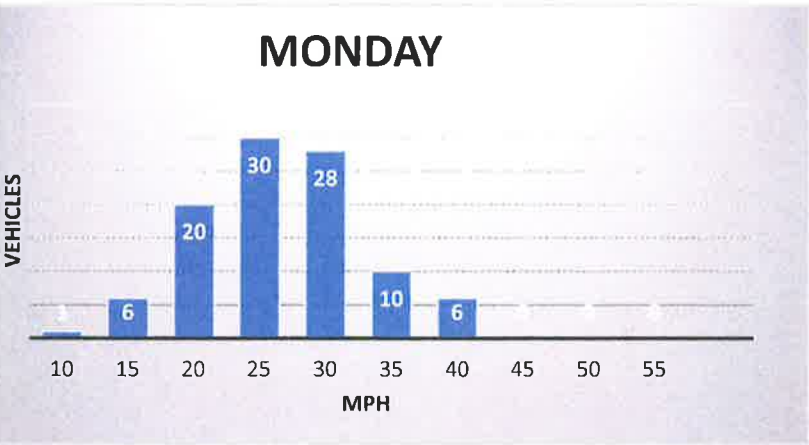
200 ft

Wednesday	MPH	Vehicles
	10	0
	15	1
	20	0
	25	16
	30	20
	35	5
	40	0
	45	0
	50	0
	55	0
Friday	MPH	
	10	0
	15	0
	20	0
	25	12
	30	28
	35	11
	40	5
	45	0
	50	0
	55	0

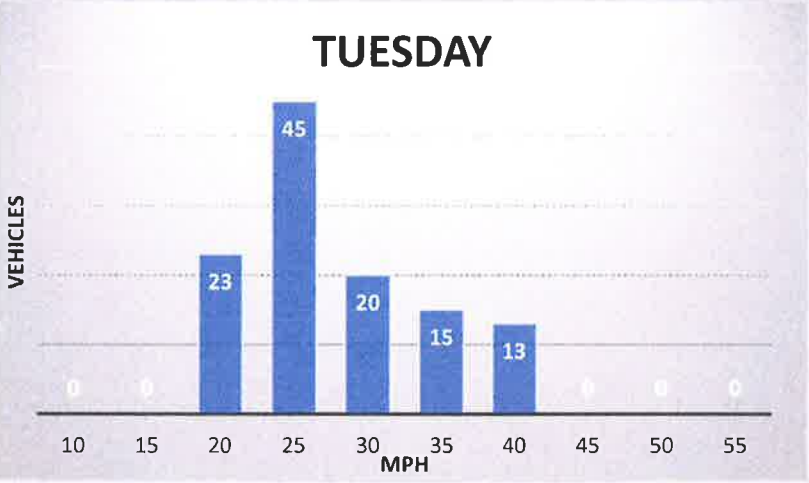


MARKED UNIT

MONDAY	MPH	Vehicles
	10	1
	15	6
	20	20
	25	30
	30	28
	35	10
	40	6
	45	0
	50	0
	55	0



TUESDAY	MPH	VEHICLES
	10	0
	15	0
	20	23
	25	45
	30	20
	35	15
	40	13
	45	0
	50	0
	55	0



UNMARKED UNIT

CITY OF IMPERIAL
COST ESTIMATE
 FOR
PEDESTRIAN CROSSING
Rectangular Rapid Flash Beacon (RRFB) System

Item No.	Description	Units	Estimate Quantity	Unit Price	Amount
1.	RRFB Assembly with Universal Mounting Kit, RRFB - Amber Light Bar, Current Controlled.	EA	2		\$6,700.00
2.	Controller, 12V, Sun saver, 136921, Radio.				
3.	Push Button Bulldog Add-On Kit w 9"x12" Frame.				
4.	Push Button Yellow sign (Optional)				
5.	R10-25,9"x12"x.080 EGP,Push Button to turn on warning lights with hand symbol.				
6.	W11-2,36"x36"x.080 DG3 FYG,Pedestrian Crossing (Symbol) Fed Spec, Fluorescent Yellow Green Sign.	EA	4	\$ 115.00	\$ 460.00
7.	W16-7PL,24"x12" DG3 FYG,Down Diagonal Left Arrow	EA	2	\$ 35.00	\$ 70.00
8.	W16-7PR,24"x12" DG3 FYG,Down Diagonal Right Arrow	EA	2	\$ 35.00	\$ 70.00
9.	Pole Package, 15', 4.5" OD, 18" J-Bolts Includes: Pole Base, J-Bolts, Standard Aluminum Pole,15' Schedule 40 Base, Aluminum Square Pedestal, No Paint.	EA	2	\$633.00	\$ 1,266.00
10.	Type III Traffic Marking Yellow Paint, Liquid Thermoplastic. 5 Gal.	EA	1	\$ 197.00	\$ 197.00
11.	Swarco Premium Glass Beads. 1 Bulk.	EA	1	\$ 49.00	\$ 49.00
12.	24" x 24" x 36" Concrete Footing with 18" x 18" Round Concrete Base.	EA	2	\$ 1,500	\$ 3,000.00
13.	Freight.	EA	1	\$ 650.00	\$ 650.00
14.	Striping	EA	1	\$ 2,500.0	\$ 2,500.00
15.	Labor	EA	1	\$ 3,000.0	\$ 3,000.00
	TOTAL				\$ 17,732.00

CITY OF IMPERIAL
COST ESTIMATE
 FOR
Asphalt Speed Bumps

Item No.	Description	Units	Estimate Quantity	Unit Price	Amount
1.	Installation of 12' Asphalt Speed Bump & Striping	EA	2	\$6,000.00	\$12,000.00
TOTAL					\$12,000.00

CITY OF IMPERIAL
COST ESTIMATE
 FOR
Asphalt Speed Humps

Item No.	Description	Units	Estimate Quantity	Unit Price	Amount
1.	Installation of 12' Asphalt Speed Hump & Striping	EA	2	\$ 7,500.00	\$ 15,000.00
TOTAL					\$ 15,000.00

CITY OF IMPERIAL
COST ESTIMATE
 FOR
Rubber Speed Bumps

Item No.	Description	Units	Estimate Quantity	Unit Price	Amount
1.	12"x72" Portable/Permanent Rubber Speed Bump	EA	4	\$ 350.00	\$ 1,400.00
2.	Speed Bump/Hump Installation	LT	1	\$600.00	\$ 600.00
TOTAL					\$2,000.00

CITY OF IMPERIAL
COST ESTIMATE
 FOR
Rubber Speed Humps

Item No.	Description	Units	Estimate Quantity	Unit Price	Amount
1.	36" x 120" Rubber Speed Hump	EA	2	\$750.00	\$ 1,500.00
2.	Speed Bump/Hump Installation	LT	1	\$750.00	\$750.00
TOTAL					\$2,250.00

CITY OF IMPERIAL
COST ESTIMATE
 FOR
Speed Radar Signs

Item No.	Description	Units	Estimate Quantity	Unit Price	Amount
1.	TC-500 New Speed Radar Sign	EA	2	\$ 13,500.00	\$ 27,000.00
2.	Speed Radar Sign Installation	LT	2	\$1,250.00	\$2,500.00
TOTAL					\$ 29,500.00

