

SUBJECT: AUTHORIZATION TO ADVERTISE FOR BIDS – 2013/2014 FISCAL YEAR MICRO-SURFACING PROJECT

SOURCE: Public Works Department - Engineering Division

COMMENT: The Plans and Project Manual have been prepared for the 2013/2014 Fiscal Year Micro-Surfacing Project. The project is part of the City's Measure 'R' street maintenance program, which consists of a durable thin asphalt overlay on several streets within the City. An important project component is the removal and replacement of badly distressed asphalt concrete. New pavement markings will be placed once each street receives the thin asphalt overlay. Streets and project limits are as follows:

- Henderson Avenue – Patsy Street to Westwood Street
- Indiana Street – Henderson Avenue to Westfield Avenue
- Leggett Street – Putnam Avenue to Porter Slough
- Gibbons Avenue – Jaye Street to Indiana Street.

Staff continues to actively update our Pavement Management System, which will allow for a more systematic approach to maintaining our arterial and collector streets. Each arterial and collector street within the City's jurisdiction is given a "Pavement Condition Index" (PCI) between 0 and 100; 0 being the worst and 100 being the best. The pavement industry has established the following general pavement treatment guide as it relates to the PCI:

| Pavement Treatment for Urban Major Roads | PCI Range |
|--|-----------|
| Do Nothing | 90-100 |
| Preventive Maintenance (e.g. slurry, chip seal, cape seal) | 70-89 |
| Thin Overlays (e.g. less than or equal to 2 inches) | 50-69 |
| Thick Overlays (e.g. more than 2 inches) | 25-49 |
| Reconstruction (e.g. remove and replace) | 0-24 |

This year's street maintenance program has been evaluated by staff and the PCI for each street is as follows:

| Street | Limits | PCI |
|------------------|----------------------------------|-----|
| Henderson Avenue | Patsy Street to Westwood Street | 85 |
| Indiana Street | Henderson Ave. to Westfield Ave. | 56 |
| Leggett Street | Putnam Ave. to Porter Slough | 85 |
| Gibbons Avenue | Jaye St. to Indiana St. | 85 |

The Engineering Division is targeting arterial and collector streets that have a PCI near or above 70 for micro-surfacing projects. Unfortunately, this is difficult to do with so many of our arterial and collectors having numerous badly distressed pavement areas.

Dir BB Appropriated/Funded MB CM J

Item No. 2

To pursue the cost effectiveness of micro-surfacing, the Engineering Division has identified the badly distressed areas for removal and replacement. This remedial action pulls the PCI up to or above the target of 70.

Indiana Street is a classic example of elevating the PCI from a low number (56) to an acceptable PCI (70) by simply removing and replacing severely distressed areas prior to the placement of the micro-surfacing. Indiana Street and Leggett Street will receive a two layer system including a bottom course of asphalt rubber chip seal followed by a top course of micro-surfacing to lock in the aggregate chips commonly known as a cape seal, which is a preventative maintenance treatment for urban major roads with PCI ratings of 70-89 and helps reduce reflective cracking.

Although Gibbons Avenue and Henderson Avenue have a PCI rating of 90, due to the age of the street segments staff felt it necessary to apply a micro-surfacing now in order to prolong pavement life.

The Plans and Project Manual have been completed and are available in the La Barca Conference Room for Council's review.

The Engineer's Estimate for the noted street projects is \$769,359. An additional \$38,467.95 is necessary for construction contingency (5%) and \$38,467.95 is required for construction management, quality control and inspection (5%). The total estimated cost associated with the project is \$846,294.90.

City Staff will provide construction management/inspection services and the City's on-call consulting firm, Consolidated Testing, with assistance from APART Inc., will provide quality control services (asphalt concrete aggregate sieve analysis, chip rock sieve analysis, sand equivalent testing, oil content confirmation, field confirmation of micro-surfacing mix design, etc.).

If the City receives favorable bids, a total of 8.58 lane miles of maintenance work will be accomplished with this project. Staff is requesting that Council consider approving bid advertisement in advance of the approved 2013/2014 budget for two distinct reasons:

1. CalEMA disaster relief funds in the amount of \$100,561 are funding a portion of the project including repairs to the damage caused on Henderson Avenue between Patsy and Balmoral from the floods of 2010. Staff felt it prudent to combine this work with the larger Measure 'R' street maintenance project in order to receive more competitive bids. The deadline for expenditure of these funds is June 21, 2013.

2. The Local Measure 'R' Funds are available now for the City by an advancement request. This year's City allocation is approximately \$748,000 and Tulare County Transportation Authority (TCTA) is in receipt of our advancement request. Staff is awaiting formal commitment by TCTA and we are confident the advancement request will be forthcoming.

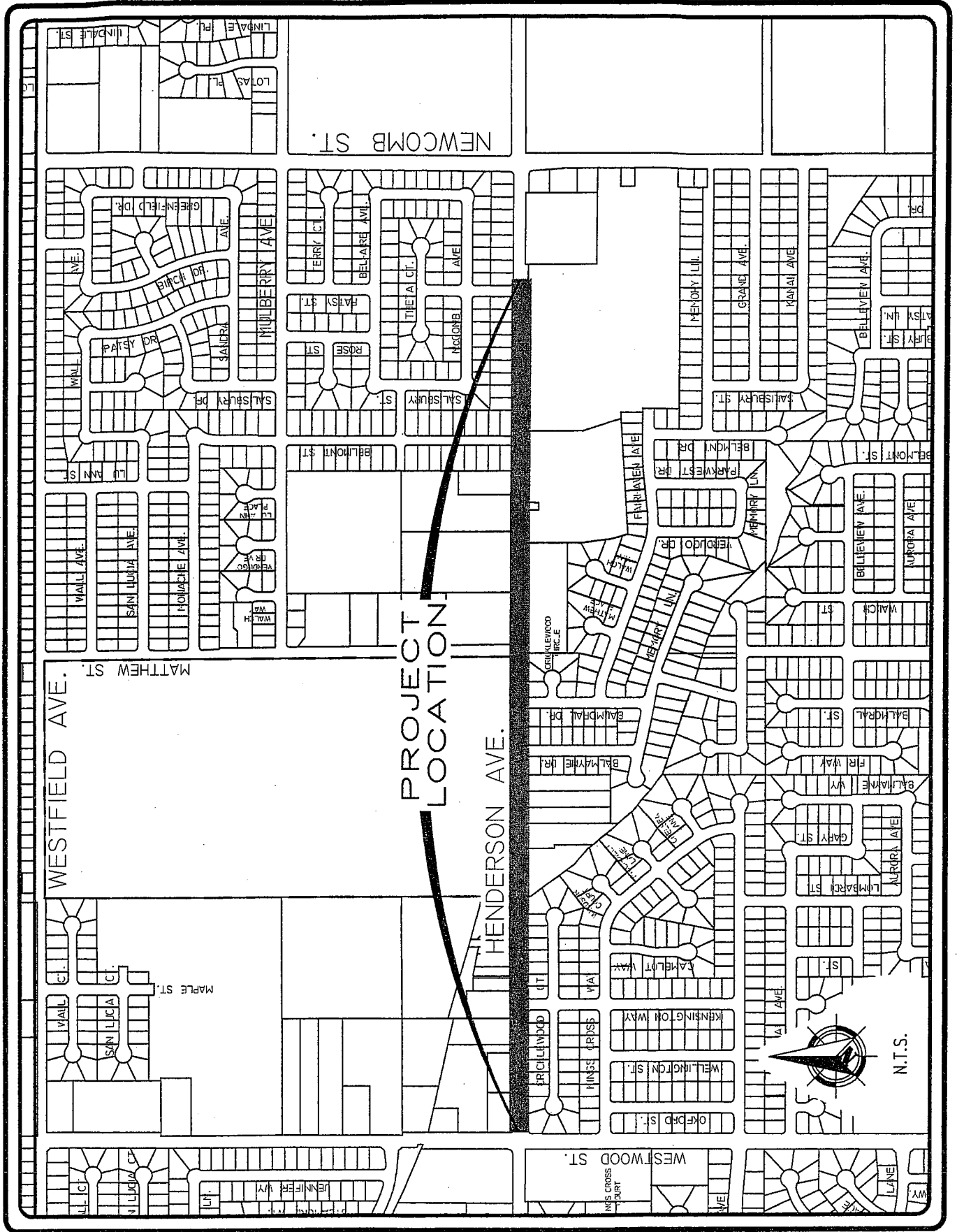
The funding source for this annual project is based on TCTA approval of the 2013/2014 Local Measure 'R' Tax Revenue advancement. It is possible that the approval of the advancement will be given by the time this report is presented to Council. Measure 'R' will fund \$746,363.90 and the remaining \$100,561 will be funded by CalEMA disaster relief.

RECOMMENDATION: That City Council:

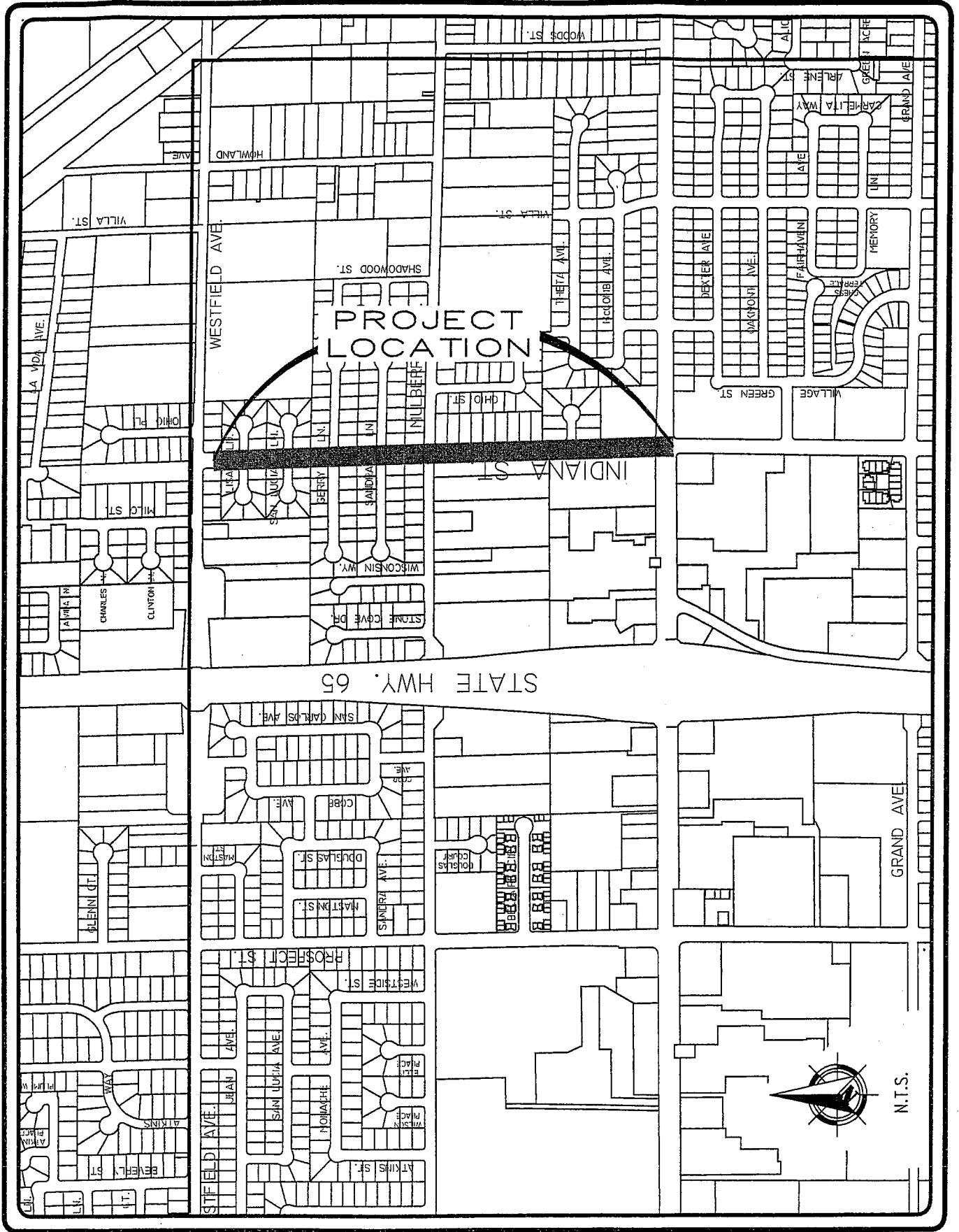
1. Approve Staffs recommended Plans and Project Manual for the 2013/2014 Micro-Surfacing Project;
2. Approve the advancement of 2013/2014 "Local" Measure 'R' Funds as approved by TCAG; and
3. Authorize staff to advertise for bids on the project.

ATTACHMENTS: Locator Maps (Henderson, Indiana, Leggett, Gibbons)
Engineer's Estimate

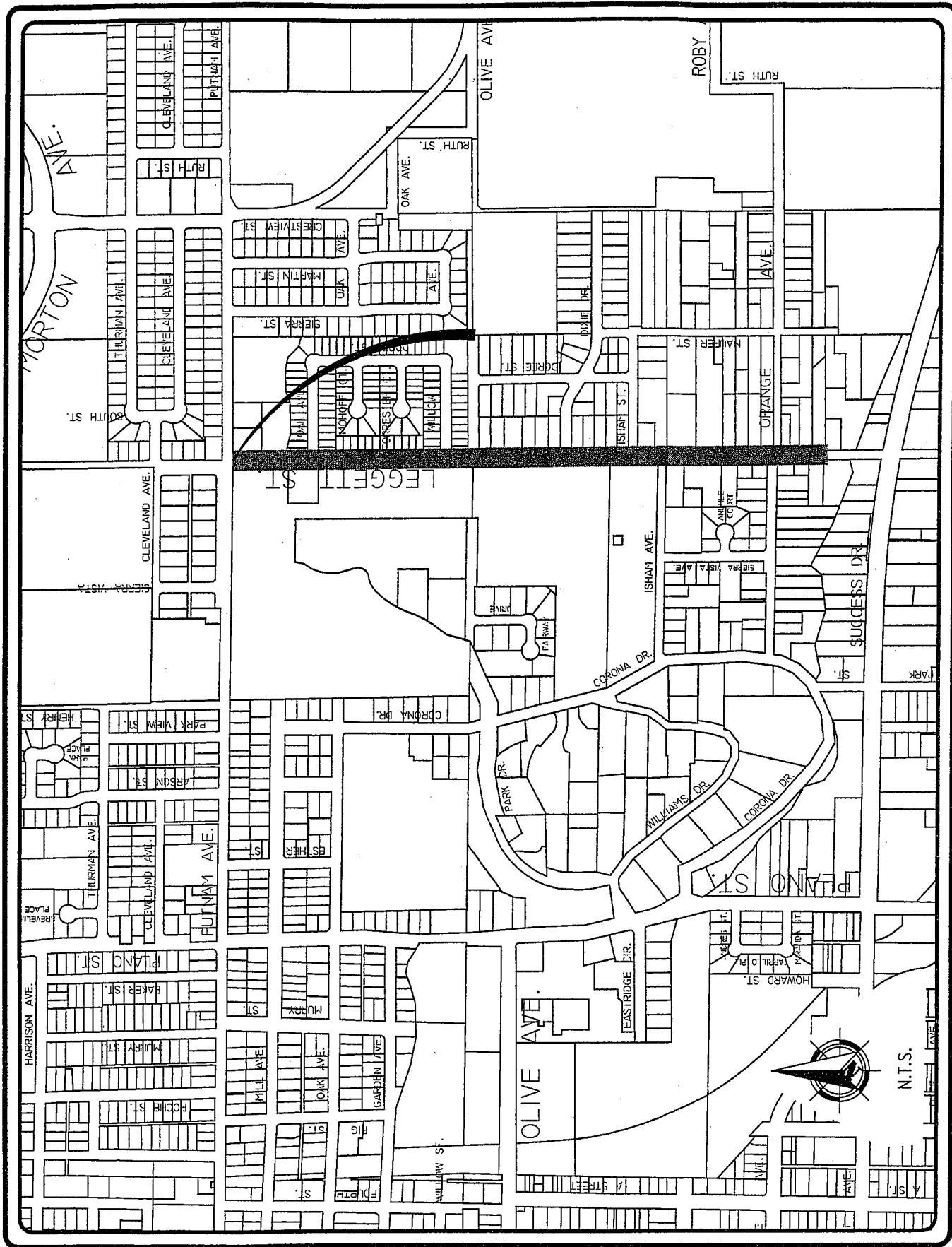
HENDERSON AVE. MICRO-OVERLAY
PROJECT LOCATION MAP



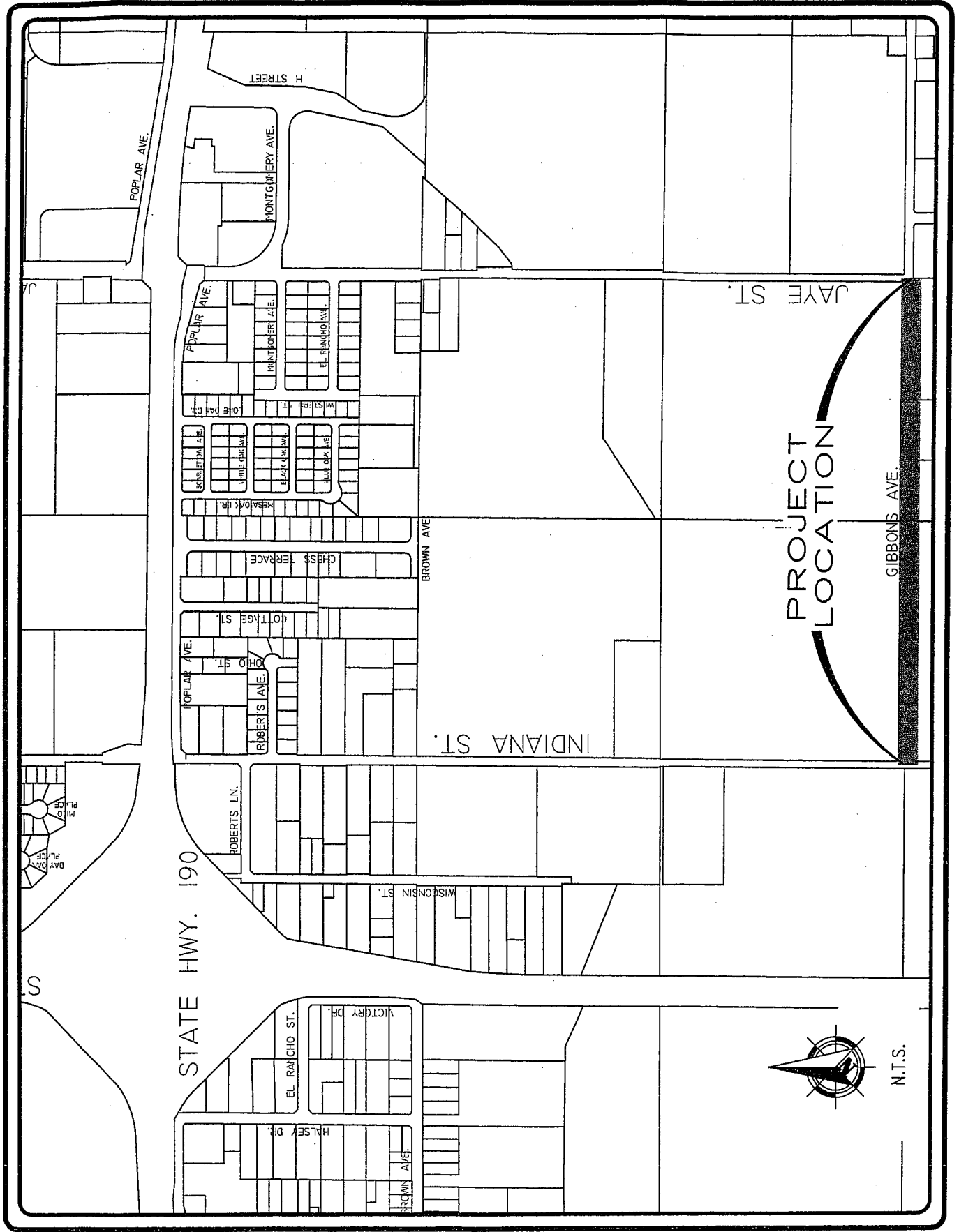
INDIANA ST. MICRO-OVERLAY
PROJECT LOCATION MAP



LEGETT ST. MICRO-OVERLAY
PROJECT LOCATION MAP



GIBBONS AVE. MICRO-OVERLAY
PROJECT LOCATION MAP



PROJECT
LOCATION

N.T.S.

| PART A – HENDERSON AVENUE (PATSY STREET TO WESTWOOD STREET) | | | | | |
|---|-----------|------|---|-----------------|---------------------|
| ITEM NO. | EST. QTY. | UNIT | ITEM | UNIT PRICE | TOTAL PRICE |
| 1 | 1 | L.S. | Mobilization and Demobilization | \$20,000.00 | \$20,000.00 |
| 2 | 1 | L.S. | Traffic Control | \$15,000.00 | \$15,000.00 |
| 3 | 74,100 | S.F. | Grind 4' Wide Wheel Tracks & Replace 2" Asphalt Concrete with 1/2" PG 64-10 Asphalt Concrete including Tack Coat & Final Sweeping per Plans & Specifications - Deliver Grindings to City Stock Pile | \$2.00 | \$148,200.00 |
| 4 | 14 | EA. | Double Adjust Water Valve Frame & Cover to Finish Grade per City Standard W-7.1 | \$600.00 | \$8,400.00 |
| 5 | 7 | EA. | Double Adjust Manhole Frame & Cover to Finish Grade per City Standard S-3.1 | \$1,000.00 | \$7,000.00 |
| 6 | 2,680 | S.F. | Grind & Replace 4" Asphalt Concrete with 1/2" PG 64-10 Asphalt Concrete including Tack Coat & Final Sweeping per Plans & Specifications - Deliver Grindings to City Stockpile | \$4.00 | \$10,720.00 |
| 7 | 30,670 | S.Y. | Type II-II Micro-Surfacing (top course) including site preparations per the guidelines set forth in the project specifications | \$3.25 | \$99,677.50 |
| 8 | 8 | EA. | Replace Traffic Loop Detector per 2010 Caltrans Standard Plan ES-5B Type E | \$500.00 | \$4,000.00 |
| 9 | 1 | L.S. | Removal & Replacement of Striping & Pavement Markings inclusive of temporary pavement delineation | \$15,000.00 | \$15,000.00 |
| | | | | SUBTOTAL | \$327,997.50 |

| PART B – INDIANA STREET (HENDERSON AVENUE TO WESTFIELD AVENUE) | | | | | |
|--|-----------|------|---|-----------------|---------------------|
| ITEM NO. | EST. QTY. | UNIT | ITEM | UNIT PRICE | TOTAL PRICE |
| 10 | 1 | L.S. | Mobilization and Demobilization | \$20,000.00 | \$20,000.00 |
| 11 | 1 | L.S. | Traffic Control | \$15,000.00 | \$15,000.00 |
| 12 | 3,673 | S.F. | Grind Full Pavement Depth (4") and Replace with Asphalt Concrete per the guidelines set forth in the project specifications | \$4.00 | \$14,692.00 |
| 13 | 16,950 | S.Y. | Asphalt Rubber Chip Seal (bottom course) including site preparations per the guidelines set forth in the project specifications | \$5.00 | \$84,750.00 |
| 14 | 16,950 | S.Y. | Type II-III Micro-Surfacing (top course) including site preparations per the guidelines set forth in the project specifications | \$3.25 | \$55,087.50 |
| 15 | 10 | EA. | Adjust Existing Manhole Cover to Finish Grade per City Standard S-3.1 | \$800.00 | \$8,000.00 |
| 16 | 3 | EA. | Adjust Existing Survey Monument Encasement to Finish Grade per City Standard M-1 | \$350.00 | \$1,050.00 |
| 17 | 17 | EA. | Adjust Existing Water Valve Cover to Finish Grade per City Standard W-7.1 | \$500.00 | \$8,500.00 |
| 18 | 1 | L.S. | Removal & Replacement of Striping & Pavement Markings inclusive of temporary pavement delineation | \$10,000.00 | \$10,000.00 |
| | | | | SUBTOTAL | \$217,079.50 |

| PART C - LEGGETT STREET (PUTNAM AVENUE TO PORTER SLOUGH) | | | | | | |
|--|-----------|------|---|-------------|---------------------|--|
| ITEM NO. | EST. QTY. | UNIT | ITEM | UNIT PRICE | TOTAL PRICE | |
| 19 | 1 | L.S. | Mobilization and Demobilization | \$10,000.00 | \$10,000.00 | |
| 20 | 1 | L.S. | Traffic Control | \$12,000.00 | \$12,000.00 | |
| 21 | 12,950 | S.Y. | Asphalt Rubber Chip Seal (bottom course) including site preparations per the guidelines set forth in the project specifications | \$5.00 | \$64,750.00 | |
| 22 | 12,950 | S.Y. | Type II-II Micro-Surfacing (top course) including site preparations per the guidelines set forth in the project specifications | \$3.25 | \$42,087.50 | |
| 23 | 15 | EA. | Adjust Existing Manhole Cover to Finish Grade per City Standard S-3.1 | \$800.00 | \$12,000.00 | |
| 24 | 24 | EA. | Adjust Existing Water Valve Cover to Finish Grade per City Standard W-7.1 | \$500.00 | \$12,000.00 | |
| 25 | 2 | EA. | Adjust Existing Survey Monument to Finish Grade per City Standard M-2 Type C | \$350.00 | \$700.00 | |
| 26 | 2 | EA. | Adjust Existing Survey Monument Encasement to Finish Grade per City Standard M-1 | \$350.00 | \$700.00 | |
| 27 | 1 | L.S. | Removal & Replacement of Striping & Pavement Markings inclusive of temporary pavement delineation | \$7,000.00 | \$7,000.00 | |
| SUBTOTAL | | | | | \$161,237.50 | |

| PART D - GIBBONS AVENUE (JAYE STREET TO INDIANA STREET) | | | | | | |
|---|-----------|------|--|-------------|--------------------|--|
| ITEM NO. | EST. QTY. | UNIT | ITEM | UNIT PRICE | TOTAL PRICE | |
| 28 | 1 | L.S. | Mobilization and Demobilization | \$10,000.00 | \$10,000.00 | |
| 29 | 1 | L.S. | Traffic Control | \$10,000.00 | \$10,000.00 | |
| 30 | 11,706 | S.Y. | Type II-III Micro-Surfacing including site preparations per the guidelines set forth in the project specifications | \$3.25 | \$38,044.50 | |
| 31 | 1 | LS | Removal & Replacement of Striping & Pavement Markings inclusive of temporary pavement delineation | \$5,000.00 | \$5,000.00 | |
| SUBTOTAL | | | | | \$63,044.50 | |

| | |
|--|---------------------|
| TOTAL CONSTRUCTION COST | \$769,359.00 |
| Construction Contingency 5% | \$38,467.95 |
| Construction Management & Quality Control (5%) | \$38,467.95 |
| | \$846,294.90 |

Estimate Certification

[Signature] 2-7-13
 Project Manager Date

[Signature] 2-11-2013
 DPWD/City Engineer Date

[Signature] 2/13/13
 Public Works Director Date

[Signature] 02/13/13
 City Manager Date