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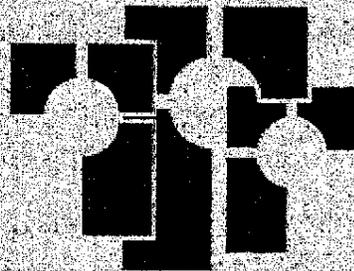
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03/24/2015

**PROJECT SPECIFICATIONS AND
CONTRACT DOCUMENTS**

PROJECT NO. 141513

2014/2015 PAVEMENT MANAGEMENT PROGRAM – SLURRY SEAL
PHASE 1

JANUARY, 2015



GLENDAL
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CITY OF GLENDALE

ENGINEERING DEPARTMENT

5850 W. Glendale Avenue, Glendale, Arizona 85301 (623) 930-3630



EXPIRES 3/31/16



Engineering Department

Memorandum

DATE: January 26th, 2015
TO: All Plan and Specification Holders
FROM: Engineering
SUBJECT: PROJECT NO. 141513 – 2014/2015 PAVEMENT MANAGEMENT PROGRAM –
SLURRY SEAL PHASE I

ADDENDUM NO. 1

In accordance with the contract documents "Information for Bidders," Page 4, Paragraph 12 CHANGES TO PLANS AND DOCUMENTS, the following revisions to the plans and specifications shall become a part of the contract documents and the bidder shall acknowledge receipt thereof as directed in Paragraph 13 of the Information for Bidders.

- Special Provisions Paragraph 13 (page 46) and sign detail on page 49 for permanent (post mounted) project signs are deleted in their entirety.
- Technical Specifications PART A: SUPPLEMENTAL SPECIAL PROVISIONS "TRAFFIC REGULATIONS" is modified to add the following:
 - Temporary "no parking" signs shall be installed along all streets scheduled to receive slurry treatment at 100' on center spacing a minimum of 48 hrs prior to start of slurry operations.
- Technical Specifications PART A: SUPPLEMENTAL SPECIAL PROVISIONS "CONSTRUCTION SEQUENCING / SCHEDULE" and PART B: BID ITEMS ITEM NO. 6 "OBLITERATE EXISTING PAVEMENT MARKINGS" is modified to add the following:
 - "Contractor shall schedule project activities to complete water based paint striping on new slurry seal asphalt pavement within 10 business days after existing striping is obliterated."

THIS ADDENDUM CONSISTS OF ONE PAGE



EXPIRES 3/31/16

PROJECT SPECIFICATIONS AND CONTRACT DOCUMENTS

MAYOR

Jerry P. Weiers

COUNCIL MEMBERS

Jaime Aldama

Samuel U. Chavira

Ian Hugh

Gary D. Sherwood

Lauren Tolmachoff

Bart Turner

CITY MANAGER

Brenda S. Fischer

CITY ATTORNEY

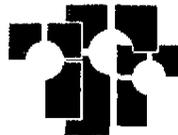
Michael D. Bailey

CITY CLERK

Pamela Hanna

CITY ENGINEER

David D. Beard



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TECHNICAL SPECIFICATIONS

NOTICE TO CONTRACTORS

Sealed bids shall be either mailed to the City of Glendale Engineering Department, 5850 West Glendale Avenue, Glendale, Arizona, 85301, or hand-delivered to the Engineering Department office, third floor, 5850 West Glendale Avenue, Glendale, Arizona, for furnishing all plant, material, equipment and labor, and to complete construction of: **PROJECT NO. 141513 - 2014/2015 PAVEMENT MANAGEMENT PROGRAM-SLURRY SEAL PHASE 1**. Project includes approximately 23 road miles of Type 2 Slurry Seal and all associated work such as crack seal, traffic control, ancillary concrete repair, etc.

Bids must be received by the Engineering Department of the City of Glendale no later than 10:00a.m., January 29, 2015. Any bid received after that time will not be considered and will be returned to the bidder. At that time, the bids will be publicly opened and read aloud in the Engineering Department Conference Room, 5850 West Glendale Avenue, Glendale, Arizona.

A pre-bid conference will be held on January 26, 2015, at 9:00a.m., in the Engineering Department Conference Room, 5850 West Glendale Avenue, Glendale, Arizona. Bidders, contractors, and other interested parties are invited to attend this conference which will be conducted by the Owner and Engineer to answer any questions.

Plans, specifications and contract documents may be examined, and copies may be obtained at City of Glendale Engineering Department, 5850 West Glendale Avenue, Glendale, Arizona. A non-refundable charge of \$25.00 shall be paid for each set of plans and specifications issued from this office.

Each bid shall be in accordance with the plans, specifications and contract documents, and shall be set forth and submitted on the BID DOCUMENTS included with the project specifications book. The BID DOCUMENTS may be removed from the project specifications book and submitted independently of such book. Each bid shall be accompanied by a proposal guarantee, in the form of a certified or cashier's check or bid bond for ten percent (10%) of the amount of bid, made payable to the order of the City of Glendale, Arizona, to insure that the successful bidder will enter into the contract if awarded to him and submit the required Certificate of Insurance, Payment Bond and Performance Bond. All proposal guarantees, except those of the three lowest qualified bidders, will be returned immediately following the opening and checking of proposals. The proposal guarantees of the three lowest qualified bidders will be returned immediately after the contract documents have been executed by the successful bidder. The proposal guarantee shall be declared forfeited as liquidated damages if the successful bidder refuses to enter into said contract or submit the Certificate of Insurance, Payment Bond and Performance Bond after being requested to do so by the City of Glendale, Arizona.

The City of Glendale reserves the right to reject any or all bids or waive any informality or irregularity in a bid. No bidder may withdraw his bid for a period of seventy-five (75) days after opening and reading of the bids.

The City of Glendale is an equal opportunity employer and minority business enterprises and women's business enterprises are encouraged to submit bids.

CITY OF GLENDALE, ARIZONA

INFORMATION FOR BIDDERS

1. **ELIGIBILITY OF CONTRACTORS:** When calling for bids for contracts for public work to be performed on behalf of the State or any political subdivision thereof, which will be paid for from public funds, no bid shall be considered for performance of a contract, including construction work which is not submitted by a bidder duly licensed as a contractor in this State. No bid shall be awarded to any contractor or entity not authorized to do business in the State of Arizona by the Arizona Corporation Commission, as required by statute.

2. **PROPOSAL:** Bids to receive consideration shall be made in accordance with the following instructions:

(a) Before submitting a bid, bidders shall carefully examine the plans and specifications and contract documents, visit the site of the work, fully inform themselves as to all existing conditions and limitations.

(b) Bids shall be submitted on the "PROPOSAL" forms provided and delivered to the City of Glendale Engineering Department on or before the day and hour set in the "NOTICE TO CONTRACTORS," as published. Bids shall be enclosed in a sealed envelope marked on the outside lower right-hand corner indicating:

1. The bidder's name and address.
2. The project number.
3. The title of the project.
4. The time and date the bids are to be received.

(c) It is the sole responsibility of the bidder to see that his bid is received in proper time. Any bids received after the scheduled closing time for receipt of bids will be returned to the bidder unopened.

(d) The signatures of all persons shall be in longhand. Any interlineations, alterations, or erasures must be initialed by the signer of the bid.

(e) Bids shall not contain any recapitulations of the work to be done. No oral, telegraphic, telephonic, or modified proposals will be considered.

3. **BID SECURITY:** Each proposal shall be accompanied by a proposal guarantee in the form of a certified or cashier's check or bid bond, with a properly executed Power of Attorney attached, in an amount equal at least to ten percent (10%) of the proposal payable without condition to the City. If a bid bond is submitted with the bid it shall be issued by a company licensed with the Arizona Department of Insurance and authorized to issue such bonds in this state. **NO BONDS ISSUED BY INDIVIDUAL SURETIES WILL BE ACCEPTED. The company issuing the bid bond shall have a rating of not less than A- in the BEST rating available at the time this project was let to bid.** The proposal guarantee shall guarantee that the bidder, if awarded the contract, will, within ten (10) working days after the award, execute such contract in accordance with the proposal and in manner and form required by the contract documents, and will furnish good and sufficient bond for the faithful performance of the same, a payment bond and a certificate of insurance. The bid securities of the three (3) lowest bidders will be retained until the contract is awarded, or other disposition made thereof. The bid securities of all bidders, except the three (3) lowest, will be returned promptly after the canvass of bids. In the event the Contractor fails, within ten (10)

working days after the award, to execute said Contract and deliver the Performance and Labor and Material Payment Bonds and the Certificate of Insurance, the Bid Security shall become the property of the City.

4. **WITHDRAWAL OF BID:** Any bidder may withdraw his bid, either personally, by telegram or by written request, at any time prior to the scheduled closing time for receipt of bids. No bid may be withdrawn by telephone. Any bid withdrawn will not be opened and will be returned to the bidder. After opening and reading of the bids, no bidder may withdraw his bid for a period of fifty (50) days from the date of opening and reading.

5. **LATE BIDS:** Bids received after the scheduled closing time for receipt of bids, as contained in the "Notice to Contractors," will not be considered and will be returned to the bidder.

6. **AWARD OR REJECTION OF BIDS:** The contract will be awarded to the lowest and best qualified responsive bidder complying with these instructions and with the "NOTICE TO CONTRACTORS." The City of Glendale, Arizona, however, reserves the right to accept or reject any or all bids or to waive any or all informalities or irregularities in the bid. Alternates may be accepted depending upon the availability of City funds. Accepted alternates will be considered in determining the lowest responsive and responsible bidder.

7. **BIDDERS INTERESTED IN MORE THAN ONE BID:** No person, firm or corporation shall be allowed to make, file, or be interested in more than one (1) bid for the same work unless alternate bids are called for in the specifications or any addenda. A person, firm, or corporation who has submitted a sub-proposal to a bidder, or who has quoted prices on materials to a bidder is not thereby disqualified from submitting a sub-proposal or quoting prices to other bidders.

8. **CONTRACT AND BONDS:** The form of contract, which the successful bidder as Contractor will be required to execute and the forms of bonds which he shall be required to furnish are included in the contract documents and should be carefully examined by the bidder. The successful bidder shall use the forms provided or such other forms as are acceptable by the City. The Contract and Performance and Labor and Material Payment Bonds will be executed in three (3) original counterparts. All bonds shall be issued by companies licensed with the Arizona Department of Insurance and authorized to issue such bonds in this state. **NO BONDS ISSUED BY INDIVIDUAL SURETIES WILL BE ACCEPTED.** The company issuing any bond shall have a rating of not less than A- in the BEST rating available at the time this project was let to bid.

9. **INSURANCE REQUIREMENTS:** Contractor, and each Sub-contractor performing work or providing materials related to this Agreement must procure and maintain the insurance coverages described (collectively, "Contractor's Policies"), until each Parties' obligations under this Agreement are completed. Contractor must at all times relevant hereto carry a commercial general liability policy with a combined single limit of at least \$1,000,000 per occurrence and \$2,000,000 annual aggregate. **Contracts in excess of \$250,000 shall require \$2,000,000 single occurrence/\$5,000,000 annual aggregate.**

Sub-contractors must at all times relevant hereto carry a general commercial liability policy with a combined single limit of at least \$1,000,000 per occurrence.

This commercial general liability insurance must include independent contractors' liability, contractual liability, broad form property coverage, products and completed operations, XCU

hazards if requested by the City, and a separation of insurance provision.

These limits may be met through a combination of primary and excess liability coverage.

Auto. A business auto policy providing a liability limit of at least \$1,000,000 per accident for Contractor and \$1,000,000 per accident for Sub-contractors and covering owned, non-owned and hired automobiles.

Workers' Compensation and Employer's Liability. A workers' compensation and employer's liability policy providing at least the minimum benefits required by Arizona law.

Equipment Insurance. Contractor must secure, pay for, and maintain all-risk insurance as necessary to protect the City against loss of owned, non-owned, rented or leased capital equipment and tools, equipment and scaffolding, staging, towers and forms owned or rented by Contractor or its Sub-contractors.

10. SUBCONTRACTORS LISTING AND CERTIFICATION OF CONTRACT COMPLIANCE:

The contractor will be required to furnish the form of subcontractors listing and certification of contract compliance with the executed contract documents. This information is requested for tracking and insurance purposes only.

11. INTERPRETATION OF PLANS AND DOCUMENTS: If any person contemplating a bid for proposed contract is in doubt as to the true meaning of any part of the plans, specifications, or other proposed contract documents, or finds discrepancies in or omissions from the plans and specifications, he may submit to the Engineering Department, a written request for an interpretation or correction thereof. The person submitting the request will be responsible for its prompt delivery. Questions received less than ninety-six (96) hours before the bid opening time may not be answered. Any interpretation or correction of the documents will be made only by Addendum, duly issued and a copy of such Addendum will be mailed or delivered to each person receiving a set of such documents. The City of Glendale will not be responsible for any other explanations or interpretations of the proposed documents.

12. CHANGES TO PLANS AND DOCUMENTS: Any changes to the plans and documents shall be made only by Addendum. No verbal or other changes to the plans and documents will be valid. A copy of each Addendum will be mailed or delivered as provided in Section 13 below.

13. ADDENDUM: Any addenda will be faxed, mailed or delivered to all who are known by the City to have received a complete set of bid documents, and to offices where bid documents have been filed for review purposes. It is the responsibility of each bidder to ascertain that he has received all addenda issued by telephoning the office identified in the NOTICE TO CONTRACTORS as the location where bid documents are available prior to submitting his bid.

Bidders shall acknowledge all addenda in the appropriate location on the "PROPOSAL" form. Failure to acknowledge receipt of Addenda shall render the bid proposal non-responsive and it will be rejected.

14. ASSIGNMENT OF CONTRACT: No assignment by the Contractor of any contract to be entered into hereunder, or any part thereof, or of funds to be received thereunder by the Contractor, will be recognized by the Owner by the Owner unless such assignment has had prior approval of the Owner, and the Surety has been given due notice of such assignment in writing and has consented

thereto in writing.

15. **PLANS AND SPECIFICATIONS TO SUCCESSFUL BIDDER:** The successful bidder may obtain five (5) sets of plans and specifications for this project from the City.

16. **TIME OF COMPLETION:** The Contractor shall commence work under this project on or before the tenth day following receipt of the Notice to Proceed for that project from the City of Glendale and shall fully complete all work under the project within Ninety (90) consecutive calendar days from and including the date of receipt of such Notice to Proceed. Time is of the essence in the completion of all work required under this contract. The Contractor shall, at all times, during the continuance of the contract, prosecute the work with such force and equipment as is sufficient to complete all work within the time specified.

17. **CITY OF GLENDALE TRANSACTION PRIVILEGE TAX:** The City of Glendale transaction privilege tax shall **NOT** be waived under the provisions of this contract. The current privilege tax rate can be obtained from the City of Glendale Sales Tax and Licenses Department. The Contractor shall be responsible for reporting and payment of all city, county, state or federal taxes.

18. **PRE-BID CONFERENCE:** A pre-bid conference will be held on January 26, 2015, at 9:00a.m., in the Engineering Department Conference Room, 5850 West Glendale Avenue, Glendale, Arizona. Bidders, contractors, and other interested parties are invited to attend this conference which will be conducted by the Owner and Engineer to answer any questions.

19. **ALTERNATES:** Alternate proposals will not be considered unless called for in the documents or any addenda thereto. When alternates are requested, all requested alternates or alternate bid items, unless otherwise stated, shall be bid. If no change in the base bid will occur with the alternate, enter "No Change."

20. **APPROVAL OF SUBSTITUTIONS:** The materials, products and equipment described in the Documents and Addenda establish a standard or required function, dimension, appearance and quality to be met by any proposed substitution. No substitute will be considered, before bid opening, unless written request for approval has been received by the City Engineer at least ten (10) working days prior to the scheduled closing time for receipt of bids. Each such request shall include the name of the material or equipment for which it is to be substituted and a complete description of the proposed substitute including any drawings, cuts, performance and test data and any other information necessary for evaluation of the substitute. Bidder shall not be entitled to approval of a substitute.

If a substitute is approved, the approval shall be set forth in an Addendum. Bidders shall not rely upon approvals made in any other manner.

21. **USE OF "EQUALS":** When the specifications for materials, articles, products and equipment state "or equal," contractor may bid upon, and use materials, articles, products and equipment which will perform equally the duties imposed by the general design. The City Engineering Department will have the final approval of all materials, articles, products and equipment proposed to be used as an "equal." It shall not be purchased or installed without the prior written approval from the City Engineering Department.

Approvals for "equals," before bid opening, may be requested in writing to the City Engineering

Department for approval. Requests must be received at least ten (10) days prior to the date set for opening the Bid Proposals. The request shall state the name of the material, article, product or equipment for which the item is sought to be considered an equal and a complete description of the proposed equal including any drawings, cuts, performance and test data and any other information necessary for approval of the equal. All approvals will be issued in the form of an addendum.

22. EXAMINATION OF CONTRACT DOCUMENTS AND VISIT SITE: Before submitting a Bid Proposal, bidders should carefully examine the Contract Documents, visit the site of the work, fully inform themselves as to all existing conditions and limitations. No consideration will be granted for any alleged misunderstanding of the material, articles or piece of equipment to be furnished or work to be done. It is understood that the tender of the Bid Proposal carries with it the agreement to all items and conditions referred to herein or indicated in the Contract Documents.

23. BIDDERS IN DEFAULT: No bid will be awarded to any person, firm or corporation that is not authorized by the Arizona Corporation Commission to do business in the State of Arizona, in arrears or is in default to the City of Glendale upon any debt or contract, or that is a defaulter as surety or otherwise upon any obligation to the City of Glendale, or has failed to faithfully perform any previous contract with the City of Glendale.

END OF INFORMATION FOR BIDDERS

PROPOSAL

Place Glendale Arizona

Date January 29, 2015

Proposal of SW Slurry Seal, Inc., a Corporation organized and existing under the laws of the State of Arizona. a partnership consisting of _____; or an individual trading as _____.

TO THE HONORABLE MAYOR AND COUNCIL
CITY OF GLENDALE
GLENDALE, ARIZONA

Gentlemen:

The undersigned hereby proposes and agrees to furnish any and all required labor, materials, construction equipment, transportation and services for the construction of: **PROJECT 141513 - 2014/2015 PAVEMENT MANAGEMENT PROGRAM-SLURRY SEAL PHASE 1**, in strict conformity with the plans and specifications for the following unit prices:

(Extension of these unit prices on the basis of estimated quantities and the totaling of these extensions are for the purpose of comparing bids only. The mathematics of such extensions and totaling will be checked and corrected by the Engineering Department, before evaluating the bids, and the lowest of such corrected and checked totals will determine the lowest bids.)

BID SCHEDULE

**2014/2015 PAVEMENT MANAGEMENT PROGRAM - SLURRY SEAL PHASE 1
CITY OF GLENDALE PROJECT NO. 141513**

BID ITEM #	DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL BID
1	Mobilization / Demobilization	1	LS	\$ 36,500.00	\$ 36,500.00
2	Project Signs	1	LS	\$ 2,500.00	\$ 2,500.00
3	Asphalt Repair (Remove/Replace), 12.5mm	2,100	SY	\$ 54.00	\$ 113,400.00
4	Crack Seal	550,000	LF	\$ 0.27	\$ 148,500.00
5	Slurry Seal	445,000	SY	\$ 1.50	\$ 667,500.00
6	Obliterate Existing Pavement Markings	50,500	LF	\$ 0.30	\$ 15,150.00
7	White Stripe (Paint) 4" Equivalent	30,000	LF	\$ 0.14	\$ 4,200.00
8	Yellow Stripe (Paint) Equivalent	19,000	LF	\$ 0.14	\$ 2,660.00
9	Pavement Marking Arrow (Paint)	20	EA	\$ 41.00	\$ 820.00
10	Preformed Pavement Marking Arrows (90 MIL)	20	EA	\$ 225.00	\$ 4,500.00
11	Preformed Pavment Markings Speed Cushion (90 MIL)	20	EA	\$ 410.00	\$ 8,200.00
12	White Stripe (60 MIL Thermoplastic) 4" Equivalent	21,000	LF	\$ 0.28	\$ 5,880.00
13	White Stripe (90 MIL Thermoplastic) 4" Equivalent	9,000	LF	\$ 0.44	\$ 3,960.00
14	Yellow Stripe (60 MIL Thermoplastic) 4" Equivalent	19,000	LF	\$ 0.28	\$ 5,320.00
15	Raised Pavement Marker (Type D/G)	200	EA	\$ 2.95	\$ 590.00
16	Raised Pavment Marker (Hydrant Marker, Type DB, Blue)	100	EA	\$ 2.95	\$ 295.00
17	Traffic Control	1	LS	\$ 109,000.00	\$ 109,000.00
18	Uniformed, Off-duty Law Enforcement Officer Contingency	200	HR	\$ 48.00	\$ 9,600.00
19	Allowance for Concrete Manhole Ring Remove and Replace	25	EA	\$ 350.00	\$ 8,750.00

20	Allowance for Concrete Valve Ring Remove and Replace	25	EA	#325.00	\$ 8125.00
21	Allowance for Concrete Sidewalk Remove and Replace	3,750	SF	#8.50	\$ 31,875.00
22	Allowance for Concrete Curb and Gutter Remove and Replace	2,500	LF	#35.10	\$ 87,750.00
23	Allowance for Concrete Valley Gutter Remove and Replace	5,000	SF	#12.25	\$ 61,250.00
24	Owners Allowance for Construction Contingency	1	LS	\$100,000.00	\$ 100,000.00
Total Base Bid					\$ 1,436,325.00

Bid Alternate No. 1

**2014/2015 PAVEMENT MANAGEMENT PROGRAM - SLURRY SEAL PHASE 1
CITY OF GLENDALE PROJECT NO. 141513**

BID ITEM #	DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL BID
BA1	Construction Materials Sampling and Testing (per Special Provisions Item 11)	1	LS	\$ 14,500.00	\$ 14,500.00
Total Bid Alternate No. 1					\$ 14,500.00

The undersigned hereby declares that he has visited the site(s) and has carefully examined the contract documents relating to the work covered by the above bid or bids.

Upon receipt of notice of the acceptance of this bid, we will execute the formal contract attached within ten (10) days, and will deliver a one hundred percent (100%) Performance Bond for the faithful performance of this Contract, together with a one hundred percent (100%) Payment Bond and Certificate of Insurance.

The bid security attached, with endorsement, in the sum of ten percent (10%) of the total bid, is to become the property of the City of Glendale, Arizona, in the event the Contract and Bonds are not executed within the time set forth, as liquidated damages for the delay and additional work caused thereby.

The undersigned has checked carefully all the above figures and understands that the City of Glendale, Arizona, will not be responsible for any errors or omissions on the part of the undersigned in making up this bid.

The undersigned understands that the Mayor and Council of the City of Glendale, Arizona, reserves the right to reject any or all bids or to waive any informalities or irregularities in the bid.

Respectfully submitted,

Arizona Contractor's
Classification and
License No.

ROC081093 A

Southwest Slurry Seal, Inc.

Contractor

By


Richard Francis

22855 N. 21st Avenue

Phoenix, AZ 85027

(Complete business address)

Telephone Number: 623-582-1919

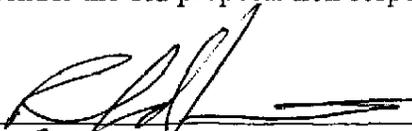
Fax Number 623-434-8805

Bidder shall signify receipt of all Addenda here (if any):

1 - Dated January 26, 2015

Failure to acknowledge receipt of all Addenda shall render the bid proposal non-responsive and will be rejected.

Acknowledged by


Richard Francis

CONSTRUCTION AGREEMENT

This Construction Agreement ("Agreement") is entered into and effective between the CITY OF GLENDALE, an Arizona municipal corporation ("City"), and Southwest Slurry Seal, Inc. an Arizona corporation ("Contractor") as of the 24 day of March, 2015.

RECITALS

- A. City intends to undertake a project for the benefit of the public and with public funds that is more fully set forth in the **Notice to Contractors** and the attached **Exhibit A** ("Project");
- B. City desires to retain the services of Contractor to perform those specific duties and produce the specific work as set forth in the Project, the plans and specifications, the **Information for Bidders**, and the **Maricopa Association of Governments** ("MAG") **General and Supplemental Conditions and Provisions**;
- C. City and Contractor desire to memorialize their agreement with this document.

AGREEMENT

In consideration of the Recitals, which are confirmed as true and correct and incorporated by this reference, the mutual promises and covenants contained in this Agreement, and other good and valuable consideration, City and Contractor agree as follows:

1. Project.

1.1 Scope. Contractor will provide all services and material necessary to assure the Project is completed timely and efficiently consistent with Project requirements, including, but not limited to, working in close interaction and interfacing with City and its designated employees, and working closely with others, including other contractors, providers or consultants retained by City.

1.2 Documents. The following documents are, by this reference, entirely incorporated into this Agreement and attached Exhibits as though fully set forth herein:

- (A) Notice to Contractors;
- (B) Information for Bidders;
- (C) MAG General Conditions, Supplemental General Conditions, Special and Technical Provisions;
- (D) Proposal;
- (E) Bid Bond;
- (F) Payment Bond;
- (G) Performance Bond;
- (H) Certificate of Insurance;
- (I) Appendix; and
- (J) Plans and Addenda thereto.

Should a conflict exist between this Agreement (and its attachments), and any of the incorporated documents as listed above, the provisions of this Agreement shall govern.

1.3 Project Team.

- (A) Project Manager. Contractor will designate an employee as Project Manager with sufficient training, knowledge, and experience to, in the City's opinion, to complete the project and handle all aspects of the Project such that the work produced by Contractor is consistent with applicable standards as detailed in this Agreement.
- (B) Project Team.
 - (1) The Project manager and all other employees assigned to the project by Contractor will comprise the "Project Team."
 - (2) Project Manager will have responsibility for and will supervise all other employees assigned to the project by Contractor.

Project 141513

(C) Sub-contractors.

- (1) Contractor may engage specific technical contractor (each a "Sub-contractor") to furnish certain service functions.
- (2) Contractor will remain fully responsible for Sub-contractor's services.
- (3) Sub-contractors must be approved by the City, unless the Sub-contractor was previously mentioned in the response to the solicitation.
- (4) Contractor shall certify by letter that contracts with Sub-contractors have been executed incorporating requirements and standards as set forth in this Agreement.

2. **Schedule.** The Project will be undertaken in a manner that ensures it is completed in a timely and efficient manner. If not otherwise stated in **Exhibit A**, the Project shall be completed by no later than within Ninety (90) consecutive calendar days from and including the date of receipt of the Notice to Proceed.

3. **Contractor's Work.**

3.1 **Standard.** Contractor must perform services in accordance with the standards of due diligence, care, and quality prevailing among contractors having substantial experience with the successful furnishing of services and materials for projects that are equivalent in size, scope, quality, and other criteria under the Project and identified in this Agreement.

3.2 **Licensing.** Contractor warrants that:

- (A) Contractor and Sub-contractors will hold all appropriate and required licenses, registrations and other approvals necessary for the lawful furnishing of services ("Approvals"); and
- (B) Neither Contractor nor any Sub-contractor has been debarred or otherwise legally excluded from contracting with any federal, state, or local governmental entity ("Debarment").
 - (1) City is under no obligation to ascertain or confirm the existence or issuance of any Approvals or Debarments or to examine Contractor's contracting ability.
 - (2) Contractor must notify City immediately if any Approvals or Debarment changes during the Agreement's duration and the failure of the Contractor to notify City as required will constitute a material default of this Agreement.

3.3 **Compliance.** Services and materials will be furnished in compliance with applicable federal, state, county and local statutes, rules, regulations, ordinances, building codes, life safety codes, or other standards and criteria designated by City.

3.4 **Coordination; Interaction.**

- (A) If the City determines that the Project requires the coordination of professional services or other providers, Contractor will work in close consultation with City to proactively interact with any other contractors retained by City on the Project ("Coordinating Entities").
- (B) Subject to any limitations expressly stated in the budget, Contractor will meet to review the Project, schedules, budget, and in-progress work with Coordinating Entities and the City as often and for durations as City reasonably considers necessary in order to ensure the timely work delivery and Project completion.
- (C) If the Project does not involve Coordinating Entities, Contractor will proactively interact with any other contractors when directed by City to obtain or disseminate timely information for the proper execution of the Project.

3.5 **Hazardous Substances.** Contractor is responsible for the appropriate handling, disposal of, and if necessary, any remediation and all losses and damages to the City, associated with the use or release of hazardous substances by Contractor in connection with completion of the Project.

Project 141513

- 3.6 **Warranties.** At any time within two years after completion of the Project, Contractor must, at Contractor's sole expense and within 20 days of written notice from the City, uncover, correct and remedy all defects in Contractor's work. City will accept a manufacturer's warranty on approved equipment as satisfaction of the Contractor's warranty under this subsection.
- 3.7. **Bonds.** Upon execution of this Agreement, and if applicable, Contractor must furnish Payment and Performance bonds as required under A.R.S. § 34-608.

4. **Compensation for the Project.**

- 4.1 **Compensation.** Contractor's compensation for the Project, including those furnished by its Sub-contractors will not exceed a total of \$1,450,825.00 (base bid and alternate one) as specifically detailed in the Contractor's bid and set forth in **Exhibit B** ("Compensation").
- 4.2 **Change in Scope of Project.** The Compensation may be equitably adjusted if the originally contemplated scope of services as outlined in the Project is significantly modified by the City.
- (A) Adjustments to the Scope or Compensation require a written amendment to this Agreement and may require City Council approval.
- (B) Additional services which are outside the scope of the Project and not contained in this Agreement may not be performed by the Contractor without prior written authorization from the City.

5. **Billings and Payment.**

5.1 **Applications.**

- (A) The Contractor will submit monthly invoices (each, a "Payment Application") to City's Project Manager and City will remit payments based upon the Payment Application as stated below.
- (B) The period covered by each Payment Application will be one calendar month ending on the last day of the month.

5.2 **Payment.**

- (A) After a full and complete Payment Application is received, City will process and remit payment within 30 days.
- (B) Payment may be subject to or conditioned upon City's receipt of:
- (1) Completed work generated by Contractor and its Sub-contractors; and
- (2) Unconditional waivers and releases on final payment from Sub-contractors as City may reasonably request to assure the Project will be free of claims arising from required performances under this Agreement.

5.3 **Review and Withholding.** City's Project Manager will timely review and certify Payment Applications.

- (A) If the Payment Application is rejected, the Project Manager will issue a written listing of the items not approved for payment.
- (B) City may withhold an amount sufficient to pay expenses that City reasonably expects to incur in correcting the deficiency or deficiencies rejected for payment.
- (C) Contractor will provide, by separate cover, and concurrent with the execution of this Agreement, all required financial information to the City, including City of Glendale Transaction Privilege License and Federal Taxpayer identification numbers.
- (D) City will temporarily withhold Compensation amounts as required by A.R.S. 34-221(C).

6. **Termination.**

6.1 **For Convenience.** City may terminate this Agreement for convenience, without cause, by delivering a written termination notice stating the effective termination date, which may not be less than 15 days following the date of delivery.

- (A) Contractor will be equitably compensated any services and materials furnished prior to receipt of the termination notice and for reasonable costs incurred.
- (B) Contractor will also be similarly compensated for any approved effort expended and approved costs incurred that are directly associated with Project closeout and delivery of the required items to the City.

6.2 **For Cause.** City may terminate this Agreement for cause if Contractor fails to cure any breach of this Agreement within seven days after receipt of written notice specifying the breach.

- (A) Contractor will not be entitled to further payment until after City has determined its damages. If City's damages resulting from the breach, as determined by City, are less than the equitable amount due but not paid Contractor for Service and Repair furnished, City will pay the amount due to Contractor, less City's damages.
- (B) If City's direct damages exceed amounts otherwise due to Contractor, Contractor must pay the difference to City immediately upon demand; however, Contractor will not be subject to consequential damages more than \$1,000,000 or the amount of this Agreement, whichever is greater.

7. **Insurance.**

7.1 **Requirements.** Contractor must obtain and maintain the following insurance ("Required Insurance"):

- (A) Contractor and Sub-contractors. Contractor, and each Sub-contractor performing work or providing materials related to this Agreement must procure and maintain the insurance coverages described below (collectively, "Contractor's Policies"), until each Parties' obligations under this Agreement are completed.
- (B) General Liability.
 - (1) Contractor must at all times relevant hereto carry a commercial general liability policy with a combined single limit of at least \$1,000,000 per occurrence and \$2,000,000 annual aggregate.
 - (2) Sub-contractors must at all times relevant hereto carry a general commercial liability policy with a combined single limit of at least \$1,000,000 per occurrence.
 - (3) This commercial general liability insurance must include independent contractors' liability, contractual liability, broad form property coverage, products and completed operations, XCU hazards if requested by the City, and a separation of insurance provision.
 - (4) These limits may be met through a combination of primary and excess liability coverage.
- (C) Auto. A business auto policy providing a liability limit of at least \$1,000,000 per accident for Contractor and 1,000,000 per accident for Sub-contractors and covering owned, non-owned and hired automobiles.
- (D) Workers' Compensation and Employer's Liability. A workers' compensation and employer's liability policy providing at least the minimum benefits required by Arizona law.
- (E) Equipment Insurance. Contractor must secure, pay for, and maintain all-risk insurance as necessary to protect the City against loss of owned, non-owned, rented or leased capital equipment and tools, equipment and scaffolding, staging, towers and forms owned or rented by Contractor or its Sub-contractors.

- (F) Notice of Changes. Contractor's Policies must provide for not less than 30 days' advance written notice to City Representative of:
- (1) Cancellation or termination of Contractor or Sub-contractor's Policies;
 - (2) Reduction of the coverage limits of any of Contractor or and Sub-contractor's Policies; and
 - (3) Any other material modification of Contractor or Sub-contractor's Policies related to this Agreement.
- (G) Certificates of Insurance.
- (1) Within 10 business days after the execution of the Agreement, Contractor must deliver to City Representative certificates of insurance for each of Contractor and Sub-contractor's Policies, which will confirm the existence or issuance of Contractor and Sub-contractor's Policies in accordance with the provisions of this section, and copies of the endorsements of Contractor and Sub-contractor's Policies in accordance with the provisions of this section.
 - (2) City is and will be under no obligation either to ascertain or confirm the existence or issuance of Contractor and Sub-contractor's Policies, or to examine Contractor and Sub-contractor's Policies, or to inform Contractor or Sub-contractor in the event that any coverage does not comply with the requirements of this section.
 - (3) Contractor's failure to secure and maintain Contractor Policies and to assure Sub-contractor policies as required will constitute a material default under this Agreement.
- (H) Other Contractors or Vendors.
- (1) Other contractors or vendors that may be contracted by Contractor with in connection with the Project must procure and maintain insurance coverage as is appropriate to their particular agreement.
 - (2) This insurance coverage must comply with the requirements set forth above for Contractor's Policies (e.g., the requirements pertaining to endorsements to name the parties as additional insured parties and certificates of insurance).
- (I) Policies. Except with respect to workers' compensation and employer's liability coverages, the City must be named and properly endorsed as additional insureds on all liability policies required by this section.
- (1) The coverage extended to additional insureds must be primary and must not contribute with any insurance or self insurance policies or programs maintained by the additional insureds.
 - (2) All insurance policies obtained pursuant to this section must be with companies legally authorized to do business in the State of Arizona and acceptable to all parties.

7.2 Sub-contractors.

- (A) Contractor must also cause its Sub-contractors to obtain and maintain the Required Insurance.
- (B) City may consider waiving these insurance requirements for a specific Sub-contractor if City is satisfied the amounts required are not commercially available to the Sub-contractor and the insurance the Sub-contractor does have is appropriate for the Sub-contractor's work under this Agreement.
- (C) Contractor and Sub-contractors must provide to the City proof of Required Insurance whenever requested.

7.3 Indemnification.

- (A) To the fullest extent permitted by law, Contractor must defend, indemnify, and hold harmless City and its elected officials, officers, employees and agents (each, an "Indemnified Party," collectively, the "Indemnified Parties"), for, from, and against any and all claims, demands, actions, damages, judgments, settlements, personal injury (including sickness, disease, death, and bodily harm), property damage (including loss of use), infringement, governmental action and all other losses and expenses, including attorneys' fees and litigation expenses (each, a "Demand or Expense"; collectively, "Demands or Expenses") asserted by a third-party (i.e. a person or entity other than City or Contractor) and that arises out of or results from the breach of this Agreement by the Contractor or the Contractor's negligent actions, errors or omissions (including any Sub-contractor or other person or firm employed by Contractor), whether sustained before or after completion of the Project.
- (B) This indemnity and hold harmless policy applies even if a Demand or Expense is in part due to the Indemnified Party's negligence or breach of a responsibility under this Agreement, but in that event, Contractor shall be liable only to the extent the Demand or Expense results from the negligence or breach of a responsibility of Contractor or of any person or entity for whom Contractor is responsible.
- (C) Contractor is not required to indemnify any Indemnified Parties for, from, or against any Demand or Expense resulting from the Indemnified Party's sole negligence or other fault solely attributable to the Indemnified Party.

7.4 Waiver of Subrogation. Contractor waives, and will require any Subcontractor to waive, all rights of subrogation against the City to the extent of all losses or damages covered by any policy of insurance.

8. Immigration Law Compliance.

- 8.1 Contractor, and on behalf any subcontractor, warrants, to the extent applicable under A.R.S. § 41-4401, compliance with all federal immigration laws and regulations that relate to their employees as well as compliance with A.R.S. § 23-214(A) which requires registration and participation with the E-Verify Program.
- 8.2 Any breach of warranty under subsection 8.1 above is considered a material breach of this Agreement and is subject to penalties up to and including termination of this Agreement.
- 8.3 City retains the legal right to inspect the papers of any Contractor or subcontractor employee who performs work under this Agreement to ensure that the Contractor or any subcontractor is compliant with the warranty under subsection 8.1 above.
- 8.4 City may conduct random inspections, and upon request of City, Contractor shall provide copies of papers and records of Contractor demonstrating continued compliance with the warranty under subsection 8.1 above. Contractor agrees to keep papers and records available for inspection by the City during normal business hours and will cooperate with City in exercise of its statutory duties and not deny access to its business premises or applicable papers or records for the purposes of enforcement of this section 8.
- 8.5 Contractor agrees to incorporate into any subcontracts under this Agreement the same obligations imposed upon Contractor and expressly accrue those obligations directly to the benefit of the City. Contractor also agrees to require any subcontractor to incorporate into each of its own subcontracts under this Agreement the same obligations above and expressly accrue those obligations to the benefit of the City.
- 8.6 Contractor's warranty and obligations under this section to the City is continuing throughout the term of this Agreement or until such time as the City determines, in its sole discretion, that Arizona law has been modified in that compliance with this section is no longer a requirement.
- 8.7 The "E-Verify Program" above means the employment verification program administered by the United States Department of Homeland Security, the Social Security Administration, or any successor program.

9. Conflict. Contractor acknowledges this Agreement is subject to A.R.S. § 38-511, which allows for cancellation of this Agreement in the event any person who is significantly involved in initiating, negotiating, securing, drafting, or creating the Agreement on City's behalf is also an employee, agent, or consultant of any other party to this Agreement.

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10. **Non-Discrimination Policies.** Contractor must not discriminate against any employee or applicant for employment on the basis of race, religion, color sex or national origin. Contractor must develop, implement and maintain non-discrimination policies and post the policies in conspicuous places visible to employees and applicants for employment. Contractor will require any Sub-contractor to be bound to the same requirements as stated within this section.

11. **Notices.**

11.1 A notice, request or other communication that is required or permitted under this Agreement (each a "Notice") will be effective only if:

- (A) The Notice is in writing, and
- (B) Delivered in person or by private express overnight delivery service (delivery charges prepaid), certified or registered mail (return receipt requested).
- (C) Notice will be deemed to have been delivered to the person to whom it is addressed as of the date of receipt, if:
 - (1) Received on a business day, or before 5:00 p.m., at the address for Notices identified for the Party in this Agreement by U.S. Mail, hand delivery, or overnight courier on or before 5:00 p.m.; or
 - (2) As of the next business day after receipt, if received after 5:00 p.m.
- (D) The burden of proof of the place and time of delivery is upon the Party giving the Notice.
- (E) Digitalized signatures and copies of signatures will have the same effect as original signatures.

11.2 **Representatives.**

(A) Contractor, Contractor's representative ("Contractor's Representative") authorized to act on Contractor's behalf with respect to the Project, and his or her address for Notice delivery is:

Richard Francis
Attn: Southwest Slurry Seal, Inc.
22855 North 21st Avenue
Phoenix, Arizona 85027

(B) City, City's representative ("City's Representative") authorized to act on City's behalf, and his or her address for Notice delivery is:

City of Glendale
Attn: Jim McMains
5850 West Glendale Avenue
Glendale, Arizona 85301

With required copies to:

City of Glendale
City Manager
5850 West Glendale Avenue
Glendale, Arizona 85301

City of Glendale
City Attorney
5850 West Glendale Avenue
Glendale, Arizona 85301

(C) Concurrent Notices.

- (1) All notices to City's representative must be given concurrently to City Manager and City Attorney.
- (2) A notice will not be considered to have been received by City's representative until the time that it has also been received by City Manager and City Attorney.

(3) City may appoint one or more designees for the purpose of receiving notice by delivery of a written notice to Contractor identifying the designee(s) and their respective addresses for notices.

(D) **Changes.** Contractor or City may change its representative or information on Notice, by giving Notice of the change in accordance with this section at least ten days prior to the change.

12. **Financing Assignment.** City may assign this Agreement to any City-affiliated entity, including a non-profit corporation or other entity whose primary purpose is to own or manage the Project.

13. **Entire Agreement; Survival; Counterparts; Signatures.**

13.1 **Integration.** This Agreement contains, except as stated below, the entire agreement between City and Contractor and supersedes all prior conversations and negotiations between the parties regarding the Project or this Agreement.

(A) Neither Party has made any representations, warranties or agreements as to any matters concerning the Agreement's subject matter.

(B) Representations, statements, conditions, or warranties not contained in this Agreement will not be binding on the parties.

(C) Any solicitation, addendums and responses submitted by the Contractor are incorporated fully into this Agreement as Exhibit A. Any inconsistency between Exhibit A and this Agreement will be resolved by the terms and conditions stated in this Agreement.

13.2 **Interpretation.**

(A) The parties fairly negotiated the Agreement's provisions to the extent they believed necessary and with the legal representation they deemed appropriate.

(B) The parties are of equal bargaining position and this Agreement must be construed equally between the parties without consideration of which of the parties may have drafted this Agreement.

(C) The Agreement will be interpreted in accordance with the laws of the State of Arizona.

13.3 **Survival.** Except as specifically provided otherwise in this Agreement each warranty, representation, indemnification and hold harmless provision, insurance requirement, and every other right, remedy and responsibility of a Party, will survive completion of the Project, or the earlier termination of this Agreement.

13.4 **Amendment.** No amendment to this Agreement will be binding unless in writing and executed by the parties. Any amendment may be subject to City Council approval.

13.5 **Remedies.** All rights and remedies provided in this Agreement are cumulative and the exercise of any one or more right or remedy will not affect any other rights or remedies under this Agreement or applicable law.

13.6 **Severability.** If any provision of this Agreement is voided or found unenforceable, that determination will not affect the validity of the other provisions, and the voided or unenforceable provision will be reformed to conform to applicable law.

13.7 **Counterparts.** This Agreement may be executed in counterparts, and all counterparts will together comprise one instrument.

14. **Dispute Resolution.** Each claim, controversy and dispute ("Dispute") between Contractor and City will be resolved in accordance with Exhibit C. The final determination will be made by the City.

Project 141513

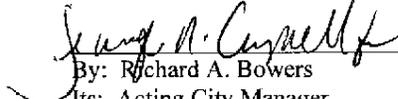
15. **Exhibits.** The following exhibits, with reference to the term in which they are first referenced, are incorporated by this reference.

Exhibit A	Project
Exhibit B	Compensation
Exhibit C	Dispute Resolution

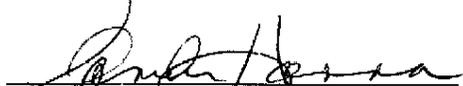
Project 141513

The parties enter into this Agreement as of the date shown above.

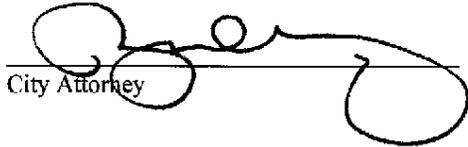
City of Glendale,
an Arizona municipal corporation


By: Richard A. Bowers
Its: Acting City Manager

ATTEST:


City Clerk (SEAL)

APPROVED AS TO FORM:


City Attorney

Southwest Slurry Seal, Inc.
an Arizona corporation


By: Richard Francis
Its: President

WOMEN-OWNED/MINORITY BUSINESS [] YES [x] NO
CITY OF GLENDALE TRANSACTION PRIVILEGE TAX NO. 100002074
FEDERAL TAXPAYER IDENTIFICATION NO. 86-0715204

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**EXHIBIT A
CONSTRUCTION AGREEMENT**

PROJECT

This project will replace specific damaged asphalt areas, provide crack sealing, as well as single slurry seal applications on various roadways within the City of Glendale. Additional items of work include all utility adjustments necessary (including fire hydrant markers), obliteration of existing short and long striping and replacement, miscellaneous concrete removal and replacement.

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**EXHIBIT B
CONSTRUCTION AGREEMENT**

COMPENSATION

METHOD AND AMOUNT OF COMPENSATION

By bid, including all services, materials and costs.

NOT-TO-EXCEED AMOUNT

The total amount of compensation paid to Contractor for full completion of all work required by the Project during the entire term of the Project must not exceed \$1,450,825.00

DETAILED PROJECT COMPENSATION

Base Bid	\$1,436,325.00
Alternate One	\$ 14,500.00
Total Compensation Amount Not to Exceed:	\$1,450,825.00

**EXHIBIT C
CONSTRUCTION AGREEMENT**

DISPUTE RESOLUTION

1. Disputes.

- 1.1 Commitment. The parties commit to resolving all disputes promptly, equitably, and in a good-faith, cost-effective manner.
- 1.2 Application. The provisions of this Exhibit will be used by the parties to resolve all controversies, claims, or disputes ("Dispute") arising out of or related to this Agreement-including Disputes regarding any alleged breaches of this Agreement.
- 1.3 Initiation. A party may initiate a Dispute by delivery of written notice of the Dispute, including the specifics of the Dispute, to the Representative of the other party as required in this Agreement.
- 1.4 Informal Resolution. When a Dispute notice is given, the parties will designate a member of their senior management who will be authorized to expeditiously resolve the Dispute.
- (A) The parties will provide each other with reasonable access during normal business hours to any and all non-privileged records, information and data pertaining to any Dispute in order to assist in resolving the Dispute as expeditiously and cost effectively as possible;
 - (B) The parties' senior managers will meet within 10 business days to discuss and attempt to resolve the Dispute promptly, equitably, and in a good faith manner, and
 - (C) The Senior Managers will agree to subsequent meetings if both parties agree that further meetings are necessary to reach a resolution of the Dispute.

2. Arbitration.

- 2.1 Rules. If the parties are unable to resolve the Dispute by negotiation within 30 days from the Dispute notice, and unless otherwise informal discussions are extended by the mutual agreement, the Dispute will be decided by binding arbitration in accordance with Construction Industry Rules of the AAA, as amended herein. Although the arbitration will be conducted in accordance with AAA Rules, it will not be administered by the AAA, but will be heard independently.
- (A) The parties will exercise best efforts to select an arbitrator within 5 business days after agreement for arbitration. If the parties have not agreed upon an arbitrator within this period, the parties will submit the selection of the arbitrator to one of the principals of the mediation firm of Scott & Skelly, LLC, who will then select the arbitrator. The parties will equally share the fees and costs incurred in the selection of the arbitrator.
 - (B) The arbitrator selected must be an attorney with at least 15 years experience with commercial construction legal matters in Maricopa County, Arizona, be independent, impartial, and not have engaged in any business for or adverse to either Party for at least 10 years.
- 2.2 Discovery. The extent and the time set for discovery will be as determined by the arbitrator. Each Party must, however, within ten (10) days of selection of an arbitrator deliver to the other Party copies of all documents in the delivering party's possession that are relevant to the dispute.
- 2.3 Hearing. The arbitration hearing will be held within 90 days of the appointment of the arbitrator. The arbitration hearing, all proceedings, and all discovery will be conducted in Glendale, Arizona unless otherwise agreed by the parties or required as a result of witness location. Telephonic hearings and other reasonable arrangements may be used to minimize costs.
- 2.4 Award. At the arbitration hearing, each Party will submit its position to the arbitrator, evidence to support that position, and the exact award sought in this matter with specificity. The arbitrator must select the award sought

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by one of the parties as the final judgment and may not independently alter or modify the awards sought by the parties, fashion any remedy, or make any equitable order. The arbitrator has no authority to consider or award punitive damages.

2.5 Final Decision. The Arbitrator's decision should be rendered within 15 days after the arbitration hearing is concluded. This decision will be final and binding on the Parties.

2.6 Costs. The prevailing party may enter the arbitration in any court having jurisdiction in order to convert it to a judgment. The non-prevailing party shall pay all of the prevailing party's arbitration costs and expenses, including reasonable attorney's fees and costs.

3. **Services to Continue Pending Dispute.** Unless otherwise agreed to in writing, Contractor must continue to perform and maintain progress of required services during any Dispute resolution or arbitration proceedings, and City will continue to make payment to Contractor in accordance with this Agreement.

4. **Exceptions.**

4.1 Third Party Claims. City and Contractor are not required to arbitrate any third-party claim, cross-claim, counter claim, or other claim or defense of a third-party who is not obligated by contract to arbitrate disputes with City and Contractor.

4.2 Liens. City or Contractor may commence and prosecute a civil action to contest a lien or stop notice, or enforce any lien or stop notice, but only to the extent the lien or stop notice the Party seeks to enforce is enforceable under Arizona Law, including, without limitation, an action under A.R.S. § 33-420, without the necessity of initiating or exhausting the procedures of this Exhibit.

4.3 Governmental Actions. This Exhibit does not apply to, and must not be construed to require arbitration of, any claims, actions or other process filed or issued by City of Glendale Building Safety Department or any other agency of City acting in its governmental permitting or other regulatory capacity.

INDIVIDUAL SURETIES WILL NOT BE ACCEPTED
STATUTORY PERFORMANCE BOND PURSUANT TO TITLE 34,
CHAPTER 2, ARTICLE 2, OF THE ARIZONA REVISED STATUTES
(Penalty of this bond must be 100% of the Contract Amount)

KNOW ALL MEN BY THESE PRESENTS:

That Southwest Slurry Seal, Inc. (hereinafter called the Principal), as Principal, and **, a corporation organized and existing under the laws of the State of Iowa, with its principal office in the City of Des Moines, (hereinafter called the Surety), as Surety, are held and firmly bound unto the City of Glendale, a municipal corporation (hereinafter called the Oblige), in the amount of One million, four hundred fifty thousand, eight hundred twenty five and no cents Dollars (~~---1,450,825.00---~~), for the payment whereof; the said Principal and Surety bind themselves, and their heirs, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, The Principal has entered into a certain written contract with the Oblige, dated the ___ day of , 20___, to construct **PROJECT 141513 - 2014/2015 PAVEMENT MANAGEMENT PROGRAM- SLURRY SEAL PHASE 1**, which contract is hereby referred to and made a part hereof as fully and to the same extent as if copied at length herein.

**Merchants Bonding Company (Mutual)

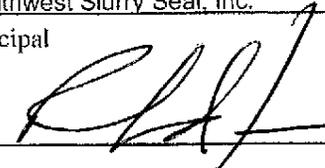
NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the said Principal shall faithfully perform and fulfill all undertakings, covenants, terms, conditions and agreements of said contract during the original term of said contract any extension thereof, with or without notice to the Surety, and during the life of any guaranty required under the contract and shall also perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of any and all duly authorized modifications of said contract that may hereafter be made, notice of which modifications to the Surety being hereby waived; then the above obligation shall be void, otherwise to remain in full force and effect.

PROVIDED, HOWEVER, that this bond is executed pursuant to the provisions of Title 34, Chapter 2, Article 2, of the Arizona Revised Statutes, and all liabilities on this bond shall be determined in accordance with the provisions of said Title, Chapter, and Article, to the extent as if it were copied at length herein.

The prevailing party or any party which recovers judgment on this bond shall be entitled to such reasonable attorney's fees as may be fixed by the court or a judge thereof.

Witness our hands this 31st day of March, 2015.

Southwest Slurry Seal, Inc.
Principal _____ Seal

By  _____

Merchants Bonding Company
Surety _____ Seal

By:  _____
Commercial West Insurance Agency
Agency of Record

1225 W Houston Ave., Ste 101, Gilbert, AZ 85233
Agency Address

Telephone Number: (480) 961-5400

MERCHANTS
BONDING COMPANY™
POWER OF ATTORNEY

Know All Persons By These Presents, that MERCHANTS BONDING COMPANY (MUTUAL) and MERCHANTS NATIONAL BONDING, INC., both being corporations duly organized under the laws of the State of Iowa (herein collectively called the "Companies"), and that the Companies do hereby make, constitute and appoint, individually,

Jacob H Grover; Jeffery L Steed; Jennifer R Cooper; Nicole Nessen-Berry; Tracy A Miller

of Gilbert and State of Arizona their true and lawful Attorney-in-Fact, with full power and authority hereby conferred in their name, place and stead, to sign, execute, acknowledge and deliver in their behalf as surety any and all bonds, undertakings, recognizances or other written obligations in the nature thereof, subject to the limitation that any such instrument shall not exceed the amount of:

EIGHT MILLION (\$8,000,000.00) DOLLARS

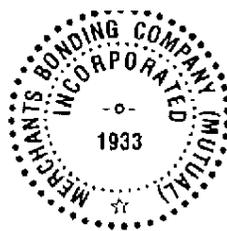
and to bind the Companies thereby as fully and to the same extent as if such bond or undertaking was signed by the duly authorized officers of the Companies, and all the acts of said Attorney-in-Fact, pursuant to the authority herein given, are hereby ratified and confirmed.

This Power-of-Attorney is made and executed pursuant to and by authority of the following By-Laws adopted by the Board of Directors of the Merchants Bonding Company (Mutual) on April 23, 2011 and adopted by the Board of Directors of Merchants National Bonding, Inc., on October 24, 2011.

"The President, Secretary, Treasurer, or any Assistant Treasurer or any Assistant Secretary or any Vice President shall have power and authority to appoint Attorneys-in-Fact, and to authorize them to execute on behalf of the Company, and attach the seal of the Company thereto, bonds and undertakings, recognizances, contracts of indemnity and other writings obligatory in the nature thereof.

The signature of any authorized officer and the seal of the Company may be affixed by facsimile or electronic transmission to any Power of Attorney or Certification thereof authorizing the execution and delivery of any bond, undertaking, recognizance, or other suretyship obligations of the Company, and such signature and seal when so used shall have the same force and effect as though manually fixed."

In Witness Whereof, the Companies have caused this instrument to be signed and sealed this 13th day of August, 2014.



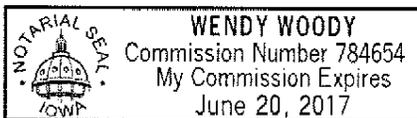
MERCHANTS BONDING COMPANY (MUTUAL)
MERCHANTS NATIONAL BONDING, INC.

By *Larry Taylor*
President

STATE OF IOWA
COUNTY OF POLK ss.

On this 13th day of August, 2014, before me appeared Larry Taylor, to me personally known, who being by me duly sworn did say that he is President of the MERCHANTS BONDING COMPANY (MUTUAL) and MERCHANTS NATIONAL BONDING, INC.; and that the seals affixed to the foregoing instrument is the Corporate Seals of the Companies; and that the said instrument was signed and sealed in behalf of the Companies by authority of their respective Boards of Directors.

In Testimony Whereof, I have hereunto set my hand and affixed my Official Seal at the City of Des Moines, Iowa, the day and year first above written.



Wendy Woody

Notary Public, Polk County, Iowa

STATE OF IOWA
COUNTY OF POLK ss.

I, William Warner, Jr., Secretary of the MERCHANTS BONDING COMPANY (MUTUAL) and MERCHANTS NATIONAL BONDING, INC., do hereby certify that the above and foregoing is a true and correct copy of the POWER-OF-ATTORNEY executed by said Companies, which is still in full force and effect and has not been amended or revoked.

In Witness Whereof, I have hereunto set my hand and affixed the seal of the Companies on this 31st day of March, 2015.



William Warner Jr.
Secretary



SWSLU-1

OP ID: MJ

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

03/31/15

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER THE MAHONEY GROUP - PHOENIX 20410 N. 19th Ave Ste 170 Phoenix, AZ 85027-1405 Peter Couture		Phone: 623-215-1300 Fax: 623-215-1333	CONTACT NAME: PHONE (A/C, No, Ext): E-MAIL ADDRESS: INSURER(S) AFFORDING COVERAGE INSURER A : State Automobile Mutual INSURER B : INSURER C : INSURER D : INSURER E : INSURER F :	FAX (A/C, No): NAIC # 25135
INSURED Southwest Slurry Seal, Inc. 22855 N 21st Avenue Phoenix, AZ 85027				

COVERAGES**CERTIFICATE NUMBER:****REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	GENERAL LIABILITY <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PROJECT <input type="checkbox"/> LOC	X		PBP2540863	05/31/14	05/31/15	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 100,000 MED EXP (Any one person) \$ 10,000 PERSONAL & AUV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000
A	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS <input checked="" type="checkbox"/> NON-OWNED AUTOS			BAP2193243	05/31/14	05/31/15	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
A	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED <input checked="" type="checkbox"/> RETENTION \$ 10,000			PBP2540863	05/31/14	05/31/15	EACH OCCURRENCE \$ 5,000,000 AGGREGATE \$ 5,000,000
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below		Y/N N/A				WC STATUTORY LIMITS <input type="checkbox"/> OTH-ER <input type="checkbox"/> E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

Project: 141513, Pavement Management Slurry Seal, Phase 1.
 City of Glendale additional insured per SL1024 1209.

CERTIFICATE HOLDER**CANCELLATION**

CITY -5

City of Glendale
 Municipal Complex
 5850 W Glendale,
 Glendale, AZ 85301-2599

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED - OWNERS, LESSEES OR CONTRACTORS - AUTOMATIC STATUS (INCLUDING COMPLETED OPERATIONS)

This endorsement modifies insurance provided under the following:
COMMERCIAL GENERAL LIABILITY COVERAGE FORM

- A. The words "you" and "your" as used in this endorsement refer to the Named Insured shown in the Declarations and any other person or organization qualifying as a Named Insured under the policy to which this endorsement is attached. "You" and "your" do not refer to an additional insured.
- B. The following is added to Section II - Who Is An Insured:
1. Any person or organization for whom you are performing operations when you and such person or organization have agreed in a written contract or written agreement that such person or organization be added as an additional insured on your policy. Such person or organization is an additional insured only with respect to:
 - a. Liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by:
 - (1) Your acts or omissions; or
 - (2) The acts or omissions of those acting on your behalf.in the performance of your ongoing operations for the additional insured.
A person or organization's status as an additional insured for ongoing operations ends when your operations for that additional insured are completed.
 - b. Liability for "bodily injury" or "property damage" caused in whole or in part, by "your work" at the location designated and described in the written contract or written agreement with that additional insured and included within the "products-completed operations hazard".
 2. With respect to the insurance afforded to the additional insured described above, the following additional exclusions or limitations apply:
 - a. This insurance does not apply to "bodily injury" or "property damage" caused by your ongoing operations, or "your work" included in the "products-completed operations hazard", unless you are required to provide such coverage for the additional insured by a written contract or written agreement. The contract or agreement must be in effect during this policy period and signed and executed by you prior to the loss for which coverage is sought. Coverage for the additional insured is provided only for the lesser of: (i) the period of time required by such contract or agreement; or (ii) the end of the policy period. In no event will coverage for the additional insured extend beyond the expiration date of the policy.
 - b. This insurance does not apply to "bodily injury", "property damage" or "personal and advertising injury" arising out of the rendering of, or the failure to render any professional engineering, architectural or surveying services by you or others on your behalf, including:
 - (1) The preparing, approving, failing to prepare approve, maps, shop drawings, opinions, reports, surveys, field orders, change orders, or drawings and specifications; or
 - (2) Supervisor or inspection activities performed as part of any related architectural or engineering activities.However, professional services do not include services within construction means, methods, techniques, sequences and procedures employed by you in connection with your operations in your capacity as a construction contractor.
 - c. This insurance does not apply to "bodily injury", "property damage" or "personal and advertising injury" arising out of the sole negligence or willful misconduct of, or defects in design provided by, the additional insured or its "employees".
 - d. This insurance does not apply to "bodily injury" or "property damage":
 - (1) Occurring after all work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance, or repairs) to be performed by or on behalf of the additional insured(s) at the location of the covered operations has been completed; or
 - (2) Once the location designated and described in the written contract or written agreement has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as part of the same project, except to the extent a written contract or written agreement requires coverage to be provided for "bodily injury" or "property damage" included within the "products-completed operations hazard".



INSURED COPY

PBP 2540863 04

BIBAKOV3 LANGKATE TABBI

- e. With respect to any person or organization added as an additional insured by this endorsement, paragraph 9.f. of Section V - Definitions - Commercial General Liability policy does not apply to "bodily injury" or "property damage" included within the "products-completed operations hazard" unless such contractual assumption of liability is specifically required by a written contract or written agreement.
- f. The insurance as provided in this endorsement does not apply to "bodily injury", "property damage" or "personal and advertising injury" caused by "your work" for which a consolidated (wrap-up) insurance program has been provided by the prime contractor, project manager or owner of a construction project in which you are involved.
- 3. The Limits of Insurance applicable to an additional insured are those specified in the written contract or written agreement or in the Declarations of this policy, whichever is less. These limits are inclusive of, and are not in addition to, the Limits of Insurance shown on the Declarations.
- 4. With respect to the coverage provided under this endorsement to an additional insured, the following is added to paragraph 4.a., Other Insurance, of Section IV - Commercial General Liability Conditions: However, if a written contract or written agreement in effect during the policy period and signed and executed by you prior to the loss for which coverage is sought specifically requires this insurance to be either primary or primary and non-contributory, this insurance will comply with that requirement.
- 5. As a condition of coverage, each additional insured must:
 - a. Give us prompt written notice of any "occurrence" or offense which may result in a claim and prompt written notice of "suit".
 - b. Immediately forward all legal papers to us, cooperate in the investigation or settlement of the claim or defense against the "suit," and otherwise comply with policy conditions.
 - c. Tender the defense and indemnity of any claim or "suit" to any other insurer which also insures against a loss we cover under this endorsement. This includes, but is not limited to, any insurer which has issued a policy of insurance in which the additional insured qualifies as an insured under any applicable policy definition. For purposes of this requirement, the term "insures against" refers to any self-insurance and to any insurer which issued a policy of insurance that may provide coverage for the loss, regardless of whether the additional insured has actually requested, demanded, or targeted tender that the insurer provide the additional insured with a defense and/or indemnity under that policy of insurance.
 - d. Agree to make available any other insurance that the additional insured has for a loss we cover under this endorsement.

* 00000003265PBP25408630410* 04

SL 10 24 12 09 Page 2 of 2
**/SL1024-200912

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CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

3/31/2015

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER INSURICA / Minard-Ames Insurance Services LLC 4646 E Van Buren Ste., #200 Phoenix AZ 85008	CONTACT NAME: Certificates	
	PHONE (A/C, No., Ext): 602-273-1625	FAX (A/C, No.): 602-273-0212
E-MAIL ADDRESS: Certs@INSURICA.com		
INSURER(S) AFFORDING COVERAGE		NAIC #
INSURER A: Travelers Property Casualty Co of A		25674
INSURER B:		
INSURER C:		
INSURER D:		
INSURER E:		
INSURER F:		

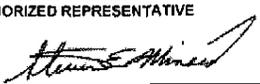
COVERAGES **CERTIFICATE NUMBER:** 1492466559 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL SUBR INSD WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
	COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC <input type="checkbox"/> OTHER:					EACH OCCURRENCE \$ DAMAGE TO RENTED PREMISES (Ea occurrence) \$ MED EXP (Any one person) \$ PERSONAL & ADV INJURY \$ GENERAL AGGREGATE \$ PRODUCTS - COMP/OP AGG \$ \$
	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS					COMBINED SINGLE LIMIT (Ea accident) \$ BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
	UMBRELLA LIAB <input type="checkbox"/> OCCUR EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED RETENTIONS \$					EACH OCCURRENCE \$ AGGREGATE \$ \$
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y	DTJUB7C16468915	1/1/2015	1/1/2016	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$500,000 E.L. DISEASE - EA EMPLOYEE \$500,000 E.L. DISEASE - POLICY LIMIT \$500,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Waiver of subrogation applies in favor of the certificate holder on the employers liability/workers compensation if required in a written contract and/or agreement. Per attached form(s): WC000313(00).
 PROJECT 141513 - PAVEMENT MANAGEMENT SLURRY SEAL, PHASE 1

CERTIFICATE HOLDER CITY OF GLENDALE MUNICIPAL COMPLEX 5850 W. GLENDALE AVENUE GLENDALE AZ 85301-2599	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE 
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**WORKERS COMPENSATION
AND
EMPLOYERS LIABILITY POLICY
ENDORSEMENT WC 00 03 13 (00)**

POLICY NUMBER: DTJUB7C164689-15

WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule. (This agreement applies only to the extent that you perform work under a written contract that requires you to obtain this agreement from us.)

This agreement shall not operate directly or indirectly to benefit any one not named in the Schedule.

SCHEDULE

DESIGNATED PERSON:

DESIGNATED ORGANIZATION:

**ANY PERSON OR ORGANIZATION FOR WHICH THE NAMED INSURED HAS AGREED IN A
WRITTEN CONTRACT EXECUTED PRIOR TO LOSS TO PROVIDE THIS WAIVER**

DATE OF ISSUE: - - -

ST ASSIGN:

CITY OF GLENDALE, ARIZONA
PUBLIC WORKS/ENGINEERING DEPARTMENT

CONTRACTOR'S AFFIDAVIT
REGARDING
SETTLEMENT OF CLAIMS

**PROJECT 141513 - 2014/2015 PAVEMENT MANAGEMENT PROGRAM-SLURRY SEAL
PHASE 1**

To the City of Glendale, Arizona

Gentlemen:

This is to certify that all lawful claims for materials, rental of equipment and labor used in connection with the construction of the above project, whether by subcontractor or claimant in person, have been duly discharged.

The undersigned, for the consideration of \$ _____, as set out in the final pay estimate, as full and complete payment under the terms of the contract, hereby waives and relinquishes any and all further claims or right of lien under, in connection with, or as a result of the above described project. The undersigned further agrees to indemnify and save harmless the City of Glendale against any and all liens, claims of liens, suits, actions, damages, charges, costs, litigation expenses, attorneys' fees and any other and expenses whatsoever, which said City may suffer arising out of the failure of the undersigned to pay for all labor performance and materials furnished for the performance of said installation.

Signed and dated at _____, this ____ day of _____, 20__.

Contractor

By _____

STATE OF ARIZONA)
) ss.
COUNTY OF MARICOPA)

The foregoing instrument was subscribed and sworn to before me this ____ day of _____, 20

Notary Public

My Commission Expires: _____

SUPPLEMENTAL GENERAL CONDITIONS

1. GENERAL: By Ordinance No. 1110 New Series, the City of Glendale adopted the "Uniform Standard Specifications for Public Works Construction," which are sponsored and distributed by the Maricopa Association of Governments. Copies of these documents, with revisions, are on file in the office of the City Engineer of the City of Glendale, and are hereby made a part of these Contract Documents.

Whenever in the Uniform Standard Specifications, the words "The Contracting Agency" are used, the meaning shall be the City of Glendale.

In all cases where ASTM, AASHTO, AWWA, USAG, Federal, City of Phoenix, MAG Specifications, Maricopa County, Arizona State Highway, City of Glendale or other standard specifications are referred to, unless otherwise stated, revisions, supplements or addenda issued on or before the date of this contract, shall prevail. In the event of any conflict between these project specifications and the requirements of the plans, detail drawings, MAG Standard Details and Specifications, these project specifications shall prevail.

2. DEFINITIONS: The following terms, as used in or pertaining to the Contract Documents, are defined as follows:

CITY: The word "City" refers to the City of Glendale, Arizona. The official representative of said City in these proceedings shall be the City Engineer.

CONTRACTOR: The word "Contractor" means the person, firm, or corporation with whom the Contract is made by the City.

MATERIALS: The term "Materials" includes, in addition to materials incorporated in the project, equipment and other material used and/or consumed in the performance of the work.

SUBCONTRACTOR: The word "Subcontractor" includes those having a direct contract with the Contractor and those who furnish material worked to a special design according to the plans and/or specifications for this work, but does not include those who merely furnish materials not so worked.

ENGINEER: The word "Engineer" means a person, firm or corporation duly authorized by the City, to act for the City in staking out the work, inspecting materials and construction, and interpreting plans and specifications.

CONTRACT DOCUMENTS: The words "Contract Documents" mean the Notice to Contractors, Information for Bidders, "Uniform Standard Specifications for Public Works Construction," MAG General Conditions, Supplemental General Conditions, Special Provisions, Supplemental Specifications, Proposal, Contract, Payment Bond, Performance Bond, Certificates of Insurance, Plans and Addenda thereto.

3. PROPOSAL QUANTITIES: It is expressly understood and agreed by the parties hereto that the quantities of the various classes of work to be done and material to be furnished under this Contract, which have been estimated as stated in the Proposal, are only approximate and are to be used SOLELY for the purpose of comparing, on a consistent basis, the proposals offered for the work under this Contract; and the Contractor further agrees that the City will not be held responsible if any of the quantities shall be found incorrect; and the Contractor will not make any claim for damages or for loss of profits because of a difference between the quantities of the various classes of work as estimated and the work actually done. If any error, omission, or mis-statement is found to occur in the estimated quantities, the same shall not invalidate this Contract or release the Contractor from the execution and completion of the whole or any part of the work in accordance with the specifications and the plans herein mentioned, or for the prices herein agreed upon and fixed therefore, or excuse him from any of the obligations or liabilities hereunder, or entitle him to any damages or compensation except as may be provided for in this Contract.

4. WITHDRAWAL OF PROPOSALS: No proposal shall be withdrawn following the opening and reading of the bids for a period of 50 days from the date of opening without the consent of the contracting agency through the body or agent duly authorized to accept or reject the proposal.

5. LOSSES AND DAMAGES: All loss or damage arising out of the nature of the work to be done or from the action of the elements, or from any unforeseen circumstances in the prosecution of the same, or from any unusual obstructions or difficulties which may be encountered in and/or during the prosecution of the work, or from any casualty whatsoever of every description, shall be sustained and borne by the Contractor at his own cost and expense except as otherwise provided by the contract documents or the laws of the State of Arizona.

6. DUST PREVENTION: The Contractor shall take whatever steps, procedures or means required to prevent abnormal dust conditions due to his construction operations in connection with this contract. The dust control measures shall be maintained at all times during construction of the project, to the satisfaction of the Engineer, in accordance with the requirements of the "Maricopa County Health Department Air Pollution Control Regulations" which have been adopted pursuant to A.R.S. § 36-779.

The Contractor shall be required to obtain the necessary permit from the Maricopa County Air Pollution Control Bureau, 1001 N. Central Ave., Phoenix, Arizona 85004 - telephone (602) 506-6727.

7. EXCESS MATERIAL: Excess material shall be removed from the work site and wasted at a location approved by the Engineer. Broken concrete and asphalt may be delivered to the Glendale Sanitary Landfill located at 115th Avenue and Glendale Avenue. The prevailing regulations and fee schedule will not be waived for work under this project. All materials, to be disposed of at the landfill, shall be weighed and disposed of at the prevailing rate.

8. STOCKPILE OF MATERIALS: The Contractor may place or stockpile materials in the public right-of-way, if approved by the Engineer, provided they do not prevent access to adjacent properties or prevent compliance with traffic regulations.

Traffic shall not be required to travel over stockpiled materials, and proper dust control shall be maintained.

9. REFUSE COLLECTION ACCESS: At any time the project construction shall require the closure or disruption of traffic in any roadway, alley, or refuse collection easement such that normal refuse collection will be interfered with, the Contractor shall, at least 48 hours prior to causing such closure or disruption, make arrangements with the Field Operations Department in order that refuse collection service can be maintained.

10. CLEAN-UP: After all work under this contract is completed, the Contractor shall remove all loose concrete, lumber, wire, reinforcing, debris, and other materials not incorporated in the work, from the site of the work. Clean-up shall include the removal of all excess pointing mortar materials within pipes and removal of over-size rocks and boulders left after finish grading. The contractor shall provide for the legal disposal of all waste products, debris, etc., and shall make necessary arrangements for such disposal.

11. SHOP DRAWINGS: The Contractor shall provide shop drawings as may be necessary for the prosecution of the work as required by the contract documents. The Engineer shall promptly review all shop drawings. The Engineer's approval of any shop drawing shall not release the Contractor from responsibility for deviations from the contract documents. The approval of any shop drawing which substantially deviates from the requirements of the contract documents shall be evidenced by a change order.

When submitted for the Engineer's review, shop drawings shall bear the contractor's certification that he has reviewed, checked, and approved the shop drawings and that they are in conformance with the requirements of the contract documents.

Portions of the work requiring a shop drawing or sample submission shall not begin until the shop drawing or sample submission has been approved by the Engineer. A copy of each approved shop drawing and each approved sample shall be kept in good order by the Contractor at the site and shall be available to the Engineer.

12. PROTECTION OF FINISHED OR PARTIALLY FINISHED WORK: The Contractor shall properly guard and protect all finished or partially finished work, and shall be responsible for the same until the entire contract is completed and accepted, in writing, by the City. The Contractor shall turn over the entire work in full accordance with the specifications before final settlement shall be made.

13. STATUS OF EMPLOYEES: Contractor shall be responsible for assuring the legal working status of its employees and its subcontractor's employees.

14. LAWS AND REGULATIONS: This Contract shall be governed by and constructed in accordance with the laws of the State of Arizona. The Contractor shall keep himself fully informed of all existing and future City and County Ordinances and Regulations and State and Federal Laws and Occupational Safety and Health Standards (OSHA) in any manner affecting the work herein specified. He shall at all times observe and comply with said Ordinances, Regulations, or Laws.

15. PERMITS: The City has obtained certain required permits which are included in the project specifications, but it will be the duty of the Contractor to determine that all the necessary permits have been obtained. The Contractor shall, at his own expense, obtain all required permits which have not been furnished by the City. A no-fee permit will be issued for work in the City of Glendale right-of-way and easement. (Also see Paragraph 7. Dust Prevention.)

16. ELECTRIC POWER AND WATER: The Contractor shall make his own arrangements for electric power and water. Subject to the convenience of the City, he may be permitted to connect to existing facilities where available, but he shall meter and bear the cost of such power or water. Fire hydrant meters may be obtained from the City of Glendale. Installation and removal of meters should be scheduled through the City's Water Services/Utilities Division at 930-2700. For details and current rates, please visit <http://www.glendaleaz.com/CrossConnection/firehydrantmeterprogram.cfm>.

17. SURVEY CONTROL POINTS AND MONUMENTS: Existing survey monuments indicated on the plans or found during construction shall be protected by the Contractor, and in the event removal is necessary, removal and replacement shall be performed by permission of the Engineer, under direct supervision of the Engineer or his authorized representative. Survey monuments shall be constructed to conform to the requirements of MAG Specifications, Section 405, and Standard Details.

18. EXISTING UTILITIES: The Contractor is hereby advised that the location of all utilities, as shown on the plans, may not be complete nor exact and the Contractor shall satisfy himself as to the exact location of the utilities by contacting Blue Stake or the utility companies before proceeding with the work. After the underground utilities are located by Blue Stake or the utility company, the contractor shall excavate in a careful and prudent manner to prevent unwillful damage to the underground utilities.

In the event the Contractor or its Subcontractor damages an existing, properly identified underground City of Glendale water or sewer line, the Contractor shall be responsible for the repairs at its expense.

The exact location of all existing underground service utilities, whether or not indicated on the plans, shall be determined by the Contractor at no expense to the City, and he shall conduct his work so as to prevent interruption of service or damage to them.

The Contractor shall protect existing utility services and be responsible for their replacement if damaged by him, or to make necessary adjustment in their location, if required, in order to complete the work for his Contract.

Utility companies and other interested parties have been provided with construction plans and the

construction schedule for this project. The Contractor shall comply with MAG Specifications 105.6 to cooperate with the utility companies.

19. **MAINTENANCE OF IRRIGATION FACILITIES:** Where irrigation facilities interfere with construction, the Contractor shall remove and replace the affected irrigation facilities to its original condition. Final acceptance of replaced facilities will depend upon final approval of the Engineer.

20. **OVERHEAD UTILITY LINES AND POLES:** Contractor is advised that when work around overhead lines and poles is required on a project the Contractor is required to coordinate with Utility Companies who own and operate overhead lines and poles. The coordination may include, but not be limited to the following activities: pole bracing, de-energizing of lines, and temporary relocations. Contractor is responsible to contact the applicable Utility Company representative and discuss his proposed construction methods; in order to determine what actions the Utility Company must take and the costs related to those actions. The Contractor shall include these costs in the applicable bid items for this project.

The primary and the backup representatives for this review and cost determinations are as follows:

Arizona Public Service:	Mr. Bobby Garza	602-371-7989
Qwest:	Mr. Ron Floyd	602-630-1932
Salt River Project:	Mr. Tim Rinn	602-236-8694
Salt River Project:	Ms. Mariann Ward	602-236-6389
Cox Communications:	Mr. Ron Pint	623-328-3529
Cox Communications:	Ms. Linda Facio	623-328-3500

21. **SOUTHWEST GAS FACILITIES EXPOSED DURING CONSTRUCTION:** The Contractor, upon exposing a gas line during construction, shall call SOUTHWEST GAS at 602-271-4277. The Southwest Gas patrolman will respond, usually within an hour, to inspect the line. Minor cuts or abrasions to the pipe coating will be rewrapped and tracer wire will be reconnected at no cost to the City.

22. **UNDERGROUND UTILITIES' BEDDING:** All water, sewer, storm drain, irrigation and other conduits installed within the City of Glendale shall be bedded from bottom of excavation to one foot above the pipe with granular bedding material meeting the requirements of Section 601.4.6 of MAG Uniform Standard Specifications. The initial bedding under the pipe shall follow City of Glendale Detail G-690.

23. **SEWER SERVICE LINES:** The Contractor shall be responsible for locating, and protecting from damage during construction, all sewer service lines within the project which are not owned by the City. Contractor will be permitted to review the "as-builts" to assist Contractor in locating the non-City owned sewer service lines. These "as-builts" were prepared, and supplied to the City, by private developers or contractors who installed the non-City owned sewer service lines. Therefore, the City does not guarantee or warranty the accuracy of such "as-builts" and the contractor, as a condition for being allowed to review such "as-builts", hereby agrees to hold the City harmless for any and all damages or other expenses contractor may incur as a result of any inaccuracies or incorrect information in these "as-builts".

24. **RIGHTS-OF-WAY:** The City will provide rights-of-way and easements for all work specified in this Contract, and the Contractor shall not enter or occupy with man, tools, equipment or materials any private ground outside the property of the City of Glendale, Maricopa County, Arizona, without the consent of the property owner.

25. **SUBCONTRACTS:** Subcontracts shall be in accordance with, and the Contractor shall be bound by, the following provisions:

All subcontracts shall be subject to the approval of the City.

All subcontracts shall be in writing and shall provide that all work to be performed thereunder shall be performed in accordance with the terms of the Contract.

Certified copies of any and all subcontracts shall be furnished to the City Engineering Department; however, prices may be omitted.

Subcontracts shall conform to the regulations governing employment of labor.

The subcontracting of any part of the work will in no way relieve the Contractor of his responsibility under the Contract.

26. **PRE-CONSTRUCTION CONFERENCE:** After completion of the Contract Documents, to include bonds, insurance and signatures, and prior to the commencement of any work on the project, the Engineer will schedule a Pre-Construction Conference. This will be held at the City of Glendale, 5850 West Glendale Avenue, Glendale, Arizona.

The purpose of this Conference is to establish a working relationship between the Contractor, Utility Companies, and the Engineer. The agenda will include critical elements of the construction schedule, procedures for handling shop drawings and other submittals, cost breakdown of major lump sum items, payment application and processing, coordination with the involved utility companies, emergency telephone numbers for all representatives involved in the course of construction, and establishment of the Notice to Proceed date.

Minimum attendance by the Contractor shall be a responsible official of the company/corporation, who is authorized to execute and sign documents on behalf of the company/corporation.

27. **OVERTIME:**

Regular Work Hours: The work required to be performed by the Plans and Specifications for the Project shall be performed only during regular working hours, unless the City has authorized overtime work in accordance with the procedures set forth below. Regular working hours shall be defined as one 8-1/2 hour shift per day, Monday through Friday, or, upon prior approval of the City, one 10-1/2 hour shift per day on a compressed four day work week during Monday through Friday. Regular working hours shall not include Saturdays, Sundays or City recognized legal holidays.

Authorization and Costs: If the Contractor desires to schedule work for times other than regular work hours (overtime), the Contractor shall make a written request to the City at least two business days prior to the scheduled overtime. The City reserves the right to deny the request to work overtime based on the best interest and needs of the City. If an overtime request is denied, the City may, at its sole discretion, extend the contract time at no additional costs to the City.

In the event the Contractor does perform work overtime, with or without the prior approval of the City, the Contractor shall be responsible to the City for all additional costs that may be incurred by the City as a result of the Contractor's overtime work, including costs for engineering, inspections, testing, surveying and construction administration, all in accordance with MAG Section 108.5. However, the Contractor shall not be responsible for City's costs incurred as a result of overtime work requested by the City or overtime work resulting from an emergency which is not the responsibility of the Contractor or its employees, subcontractors or suppliers. The City's cost will be billed directly to the Contractor or may, at the City's option, be deducted from monies due the Contractor.

28. **CONTRACTOR'S CONSTRUCTION SCHEDULE:** Concurrently, with the execution of the contract and prior to the pre construction conference, the Contractor shall submit a preliminary schedule for the Engineer's review and acceptance. The schedule shall be in sufficient detail to allow the Engineer to determine if the proposed schedule will conform to an acceptable program of construction operations, as determined by the contracting agency. Within ten calendar days after the preliminary schedule, described above, has been accepted by the Engineer, the Contractor shall submit a progress schedule, utilizing the critical path method scheduling technique, showing the order in which he proposes to carry out the work, the dates on which he will start each phase of the work, and the contemplated date for completion of each phase. The Contractor shall not be permitted to commence construction until the schedule complying with this paragraph has been submitted to the

City. The Contractor will not be granted any extension to the contract time or compensation for any damages as a result of the City's refusal to allow Contractor to commence construction until the critical path method progress schedule has been submitted and accepted by the Engineer.

The critical path method (CPM) scheduling technique requires a breakdown of the entire work into individual tasks and an analysis of the number of days required to perform each task. The schedule submitted to the City should highlight and identify the critical path for the project. After the work is in progress, the Contractor shall submit supplementary progress schedules, using the critical path method technique, of the progress to date and projection for completion. The supplementary progress schedules shall be submitted with each pay request in accordance with the paragraph, "Payments to Contractors," of these Supplemental General Conditions. The progress schedules shall be subject to the acceptance of the Engineer. In the event the Contractor fails to submit a supplementary progress schedule acceptable to the Engineer, the City may withhold further progress payments to the Contractor until the Contractor submits an acceptable supplementary progress schedule, which is accepted by the Engineer, to the City. Schedule changes requiring an increase in the City's engineering personnel on the project shall not be put into effect until the Engineer has approved such increase and made arrangements for the required additional personnel.

29. CHARACTER OF WORKMEN: None but skilled foremen and workmen shall be employed on work requiring special qualifications. When required by the Engineer, the Contractor shall discharge any person who is, in the opinion of the Engineer, disorderly, dangerous, insubordinate, incompetent, or otherwise objectionable. The Contractor shall keep the City harmless from damages or claims for compensation that may occur in the enforcement of this section of the specifications.

30. HINDRANCES AND DELAYS: Except as otherwise provided herein, no charge shall be made by the Contractor for hindrances or delays from any cause during the progress of the work embraced in this Contract; but such delays, if due to no fault or neglect of the Contractor, shall entitle the Contractor to an extension of time allowed for completing the work, sufficient to compensate for the delay, the amount of the delay to be determined by the Engineer, provided the Contractor shall give said Engineer immediate notice in writing of the cause of such delay.

30.1 Delay: In the event of a delay for which the City is solely responsible, which is unreasonable under the circumstances and which was not within the contemplation of City and Contractor at the time this Contract is executed, City and Contractor shall negotiate, in good faith, a payment by the City to Contractor for the expenses incurred by Contractor as a result of such delay, in accordance with the City of Glendale Engineering Department's POLICY STATEMENT FOR CALCULATING DELAYS AND DAMAGES. This provision shall not be construed to void any provision in the contract which requires notice of delay or provides for liquidated damages. However, if the delay is the result of any act or neglect of a third party, including the architect, engineer or other contractor employed by the City, or by labor disputes, fire, unusual delay in transportation, adverse weather conditions not reasonably foreseeable, unavoidable casualties, or any causes beyond the Contractor's control, the Contractor shall not be entitled to any payments or compensation for expenses incurred as a result of such delay, but the Contract Time shall be extended by Change Order for such reasonable time as the Engineer may determine. No extension or compensation will be granted for any delay which is the result, wholly or partially, of any act or neglect of Contractor or any Subcontractor hired by Contractor.

31. LIQUIDATED DAMAGES:

31.1 Should the contractor fail to substantially complete the work under this contract within the time for completion stated in the paragraph "Time of Completion," in the Information for Bidders, then the contractor shall pay the City of Glendale, Arizona, liquidated damages, pursuant to the provisions of Section 108.9, Standard Specifications for Public Works Construction, Maricopa Association of Governments, until the work is substantially complete.

31.2 Should the contractor fail to fully and finally complete the work under this contract within the time for completion set forth in the paragraph "Time of Completion," in the Information for Bidders, even though the contractor has achieved substantial completion of the work within such time, then the

contractor shall pay the City of Glendale, liquidated damages (pursuant to the provisions of Section 108.9, Standard Specifications for Public Works Construction, Maricopa Association of Governments), in an amount equal to 100% of the applicable liquidated damage rate set forth in MAG Section 108.9 for each and every calendar day of delay until the work is fully and finally complete and accepted.

31.3 The date of substantial completion shall be the date when the work is sufficiently complete, in accordance with the contract documents, so the owner can fully occupy and utilize the work or designated portion thereof for the use for which it is intended, with all the project's parts and systems operable as required by the contract documents and all the work is complete, accessible, operable, and usable by the owner for its intended purpose(s), and all parts, systems and sitework are 100% complete and cleaned for the owner's use. Only incidental corrective work and final cleaning (if required), beyond cleaning needed for the owner's full use, may remain for final completion.

31.4 Full and final completion shall be that date when all work under the project, including incidental corrective work under punch list and final cleaning, has been completed and the entire project is accepted by the owner.

32. PAYMENTS TO CONTRACTOR: The measurements of quantities and the payments to the Contractor shall be in accordance with MAG Uniform Standard Specifications for Public Works Construction, Part 100 - General Conditions, Section 109 - Measurements and Payments.

Payments will be made on the basis of itemized, monthly statements prepared by the City and signed by the Contractor. The Contractor shall submit an itemized, duly certified and approved estimate for work completed through the last day of the preceding month in accordance with MAG Specifications, as amended by these Supplemental General Conditions. Upon approval of the pay estimate, the City will mail the check directly to the Contractor.

The pay estimate shall be accompanied by an updated progress schedule as required by these Supplemental General Conditions and a cash flow report when required by the Special Provisions. Approval of progress payments shall be conditional upon submittal of progress schedules and cash flow reports, when required, which are acceptable to the Engineer.

Upon 100% completion and acceptance of the project, and with the request for final payment, the Contractor shall complete and submit the "Contractor's Affidavit Regarding Settlement of Claims" form which is included in these specifications. Before final payment and release of retention, Contractor must arrange for its Surety to provide the City with a fully executed AIA Consent of Surety form. To avoid delays in the final payment, the Surety may send the Consent of Surety directly to the City via fax at (623) 915-2861, and mail the original to the City of Glendale Engineering Department, 5850 West Glendale Avenue, Glendale, Arizona 85301. Should any ambiguity arise between the Contract and these Conditions, the provisions of the Contract shall prevail.

33. WARRANTY: This project shall have a 2 year warranty. The warranty period shall begin upon final acceptance of the work by the City of Glendale.

END OF SUPPLEMENTAL GENERAL CONDITIONS

SPECIAL PROVISIONS

1. **SCOPE OF WORK:** This project will replace specific damaged asphalt areas, provide crack sealing, as well as single slurry seal applications on various roadways within the City of Glendale. Additional items of work include all utility adjustments necessary (including fire hydrant markers), obliteration of existing short and long striping and replacement, miscellaneous concrete removal and replacement.

2. **DEFINITIONS:**

A. **Section:** Reference to a Section on the plans or in these Specifications shall mean a Section of the Uniform Standard Specifications for Public Works Construction, sponsored and distributed by Maricopa Association of Governments (MAG), latest revision. The provisions of MAG Uniform Standard Specifications and Details for Public Works Construction, which are not altered or modified by the drawings or by these Special Provisions or by any subsequently issued Addendum, shall apply to the contract even though the Contractor's attention is not specifically drawn to such provisions.

B. **Standard Detail:** Reference to a MAG Standard Detail (MAG S.D.) on the plans or in these specifications shall mean a standard detail drawing in the latest revision of the Uniform Standard Specifications for Public Works Construction, sponsored and distributed by Maricopa Association of Governments. City of Glendale Standard Detail (C.O.G. S.D.) shall mean a standard detail drawing in the City of Glendale's Engineering Design and Construction Standards, latest revision. City of Phoenix Standard Detail (C.O.P. S.D.) shall mean a standard detail drawing in the Phoenix Supplemental Standard Details for Public Works Construction, latest revision.

3. **CONSTRUCTION SURVEYING AND LAYOUT:** The work under this item shall consist of furnishing all materials, personnel, equipment, and traffic control necessary to perform all surveying, staking, and verification of the accuracy of all control points per the plans and as directed by the Engineer. Included in this work shall be all calculations required for the satisfactory completion of the project in conformance with the plans and these Special Provisions. The work shall be done under the direction of a registered professional engineer or a registered land surveyor employed by the Contractor. The crew chief shall be NICET Certified Level III or a registered land surveyor. The Contractor shall furnish all equipment, materials and other devices necessary for establishing, checking, marking and maintaining points, lines, grades and layouts.

Throughout the work, the Contractor shall set all stakes including, but not limited to; centerline stakes; offset stakes; reference point stakes; slope stakes; pavement lines, curb lines and grade stakes at intervals not greater than 25 feet; stakes for sewers, roadway drainage, pipe, under drains, clearing, paved gutter, fence, right of way markers, and survey monuments; blue tops of subgrade, subbase and base courses at intervals not greater than 50 feet; permanent as-built elevation marks; and all other horizontal or vertical controls necessary for complete and accurate layout and construction of the work. Stakes for horizontal and vertical curves shall be set at intervals appropriate for the length of curve. The coordinates of any new control points established by the Contractor during the course of the work shall be given to the Engineer within five working days of control point establishment.

Field notes shall be kept in standard field notebooks furnished by the Contractor. Field notes shall be kept in a clear, orderly and neat manner consistent with standard surveying practices. The standard field notebooks or copies of, shall be made available to the Engineer upon request at any time during the prosecution of the work.

When utility adjustments are a part of the contract, the Contractor shall perform all layout work and set all control points, stakes and references necessary for carrying out all such adjustments.

The Contractor shall cross-section all fill areas for monthly, quantity estimates and as directed by the Engineer. The Engineer may verify the accuracy of same. The Engineer shall check all measurements

that involve determination of final quantities.

Any errors, omissions or discrepancies in the project plans shall be immediately brought to the attention of the Engineer. The Contractor shall promptly notify the Engineer in writing, explaining the problem in detail. The Engineer will advise the Contractor within three working days of any corrective actions deemed necessary. No changes in the project plans will be allowed without the approval of the Engineer.

The Contractor shall be compensated for additional work associated with survey and layout when:

- A. The project plans do not provide sufficient information and new calculations must be performed.
- B. The Contractor performs survey work based on erroneous plan information, which results in the duplication of work.
- C. Changes by the Engineer to the plan information for which the Contractor has already performed the work and results in the duplication of such work.

The Contractor shall not be due compensation for any survey work when:

- A. Information provided on the plans is sufficiently complete to allow any additional information necessary for the complete layout of the work to be routinely calculated.
- B. The Contractor fails to inform the Engineer of discovered plan errors before the performance of any extra survey work.
- C. Work is included in any other pay item.

The Contractor shall inform the Engineer in a timely manner of any omissions, ambiguities, or errors which the Contractor feels may result in extra calculations or survey work, so as not to delay the project or create any unnecessary calculations.

All additional survey work shall be documented by the Contractor and verified by the Engineer before compensation may be granted. Documentation shall consist of a detailed diary specifically addressing the work involved in the alleged problem area. The Contractor may be required to provide calculations, charts, graphs, drawings, or any other physical evidence, which will verify additional work.

The Contractor shall be responsible for verifying curb and gutter grades before placement of concrete using a steel straightedge, string line or other method approved by the Engineer. The field verification shall be performed in the presence of the Engineer or designated representative.

The Engineer reserves the right to make inspections and random checks of the staking and layout. Inspection or acceptance of all or any part of the Contractor's staking and layout by the Engineer does not relieve the Contractor of full responsibility to secure the proper dimensions, grades and elevations of the work.

If, in the Engineer's opinion, the work is not being performed in a manner that will assure proper controls and accuracy, the Engineer will order any or all of the staking and layout work redone at no additional cost to the City. If any portion of the Contractor's staking and layout work is ordered redone and requires additional rechecking by the Engineer, the City shall be reimbursed for all costs

for such additional checking. The amount of such costs will be deducted from the Contractor's monthly estimate.

The Contractor shall provide final "as-constructed" field surveying, including both vertical and horizontal data based on the finished work. The Contractor shall also furnish final Record Drawings for all improvements. The Record Drawings shall be prepared by a Registered Land Surveyor and submitted to the Owner for approval prior to final acceptance of the project. The Record Drawings shall be prepared on a set of reproducible copies of the construction plans. The completed drawings shall be signed and sealed by the Registered Land Surveyor responsible for obtaining the As-built information and preparing the Record Drawings.

All survey field books and documentation shall be available for inspection by the Engineer.

Payment for this item is incidental to the work. The contractor will receive no compensation.

4. **SUSPENSION OF WORK:** The Engineer reserves the right to suspend the work wholly or in part if deemed necessary for the best interest of the City. This suspension will be without compensation to the Contractor, other than to adjust the contract time in accordance with MAG Section 108.

5. **COMPLIANCE WITH MANUFACTURER'S INSTRUCTIONS:** In all instances wherein the item and/or specifications require installation or construction in accordance with either manufacturer's or supplier's recommendations and/or instructions, said recommendations and/or instructions shall be submitted with the applicable portions clearly marked for approval prior to the commencement of work on that item or portion of the contract.

6. **TRAFFIC REGULATIONS:**

6.1 All traffic affected by this construction shall be regulated in accordance with the City of Phoenix "Traffic Barricade Manual," the "Manual of Uniform Traffic Control Devices" and these Special Provisions. The following traffic restrictions are minimum requirements throughout the construction period:

6.1.1 All references in the City of Phoenix "Traffic Barricade Manual" and the "Manual of Uniform Traffic Control Devices" to "arterial" and/or "collector" streets shall mean "arterial and/or major arterial" streets and are referred to as "major" streets in the following sections.

6.1.2 A minimum of two travel lanes (one for each direction) shall be maintained open to traffic at all times on all major streets. All work that enters or crosses a major street must be done at times other than 6:00 a.m. to 8:30 a.m., and 4:00 p.m. to 6:00 p.m. unless approved by the Transportation Director or Designee.

6.1.3 A travel lane shall be defined as ten (10) feet of roadway not obstructed by traffic control devices with a safe motor vehicle operating speed of twenty-five (25) miles per hour.

6.1.4 A travel lane will not be considered as open to traffic until it has been graded reasonably smooth and is paved with a minimum of two (2) inches of asphalt. This shall be considered temporary pavement and shall be removed completely before proceeding with final surfacing.

6.1.5 The Contractor shall provide and maintain all required and requested traffic control devices to protect and guide traffic for all work in the construction area.

6.1.6 Intersection area shall be defined as all of the area within the right-of-way of intersecting streets, plus two-hundred fifty (250) feet beyond the center of the intersected streets on

all legs of the intersection.

- 6.1.7 The Contractor shall maintain all existing traffic signs erect, clean and in full view of the intended traffic at all times. Street name signs at major street intersections shall be maintained erect at all times. If any signs interfere with construction, the Contractor shall notify the Transportation Department at least 48 hours in advance before covering or removing said signage. The Contractor shall be responsible for reinstalling all signs removed or covered and verifying they are correctly placed. The Transportation Department will inspect all signage prior to completion of the project.
- 6.1.8 Local access to all properties on the subject project shall be maintained at all possible times in the form of a safe and reasonable direct route to at least one of the above defined major streets. Whenever local access cannot be maintained, the Contractor shall notify the affected property owner or user and the Engineer at least Seventy-Two (72) hours in advance.
- 6.1.9 The Contractor shall be required to provide a uniformed off-duty City of Glendale police officer to assist with traffic control whenever traffic in any one direction is restricted to one lane at a signalized major intersection or at other locations if it should become necessary in the opinion of the Transportation Director or Designee. If the Contractor chooses to use a police officer at other locations during peak traffic hours or to assist with his other traffic control operations, the cost shall be included in the lump sum for "Traffic Control" and not paid out of the hours allowed for "Off Duty Glendale Police Officer." All requests for off-duty officers will be made through the Glendale Police Department, Off-Duty Work Administrator. The Contractor must provide evidence of workmen's compensation coverage before any officer will be permitted to work.

Measurement for payment of the uniformed off-duty Glendale police officer hours will be made by the actual number of man-hours used for traffic control at signalized major intersections or as approved by the Engineer. Because the quantity of hours is dependent on the Contractors schedule of activities, the unit price bid for this item will be administered as a contingency bid item and any adjustment in hours will not be subject to the 20 percent limitation.

Payment for the off-duty Glendale police officer will be made at the contract unit price bid per hour for OFF DUTY GLENDALE POLICE OFFICER and shall include the net hourly rate of \$35.00 per police officer with a three (3) hour minimum. The net hourly rate shall be increased to include withholding for Federal, State, FICA, Medicare, Workmen's Compensation insurance and any payroll administrative costs.

- 6.1.10 The Contractor shall prepare a traffic control plan for the project and submit it to the City Transportation Director or Designee for review and approval at least fifteen (15) working days prior to the start of construction. The traffic control plan must be submitted through the City of Glendale on-Line Traffic Control Plan application process at www.glendaleaz.com/transportation/TrafficControlForm.cfm. The traffic control plan shall include message boards installed a minimum of seven (7) working days prior to restrictions when requested by the Transportation Director or Designee, additional public notification shall be required for major restrictions that impact adjacent stakeholders. Any changes to the traffic control plan during construction shall be submitted to the City Transportation Director or Designee for approval at least seventy-two (72) hours before implementation.

Payment for this item shall be made at the contract lump sum price for TRAFFIC CONTROL.

- 6.1.11 It is the City's desire to maintain one lane of traffic in each direction on minor streets whenever possible. Should it become imperative for the Contractor to close off a portion of any minor street or reduce the travel way to a single lane, he/she must obtain approval from the City Transportation Director or Designee Seventy-Two (72) hours prior to

implementing a traffic control change. He/she must provide all the necessary signs to detour traffic and/or flag person to control traffic for a single lane. The maximum amount of time that the street may be closed is from 9:00 a.m. until 4:00 p.m.

6.1.12 **Flagger Requirements:** All flaggers shall be properly trained and certified by a recognized source, such as the American Traffic Safety Services Association (ATSSA) or National Safety Council, and shall carry with them at all times proof that training and certification requirements have been completed within the last two years.

7. **ENERGIZED AERIAL ELECTRICAL POWER LINES:** The utility company maintains energized aerial electrical power lines in the immediate vicinity of this project. Do not consider these lines to be insulated. Construction personnel working in proximity to these lines are exposed to an extreme hazard from electrical shock. Contractors, their employees, and all other construction personnel working on this project must be warned of the danger and instructed to take adequate protective measures, including maintaining a minimum ten (10) feet clearance between the lines and all construction equipment and personnel. (See: OSHA Standard 1926.550(a)15.) As an additional safety precaution, Contractors should also be instructed to call the utility company to arrange, if possible, to have these lines de-energized or relocated when the work reaches their immediate vicinity. The cost of such temporary arrangements would be borne by the Contractor. The utility company can often respond to such requests if two days advance notice is given, but some situations may require up to sixty (60) days lead time for relocation or other arrangements.

8. **CONCRETE GUTTER WATER TESTING:** The MAG Uniform Standard Specifications, Section 340.3, **CONSTRUCTION METHODS**, shall be modified as follows: The 1/2 inch referenced in Paragraph 16 beginning, "When required by the Engineer, gutter having a slope of 0.8 foot....," shall be changed to 1/4 inch.

9. **RECORD DRAWINGS:** The Contractor shall maintain one set of contract drawings with all changes, deviations, additions and deletions clearly marked thereon. Upon completion of the work, this set of drawings, shall be marked "RECORD DRAWINGS," dated, and delivered to the Engineer prior to approval of the Contractor's final payment request.

10. **AZPDES Permit Requirements:**

A. This project is subject to the Arizona Pollutant Discharge Elimination System (AZPDES) Stormwater requirements for construction sites under the Environmental Protection Agency (EPA) General Permit for Arizona. Under provisions of that permit, the Contractor shall be designated as permittee, and shall take all necessary measures to assure compliance with the AZPDES General Permit for Arizona as well as all other applicable Federal, State and local laws, ordinances, statutes, rules and regulations pertaining to stormwater discharge. As the permittee, the Contractor is responsible for preparing, in a manner acceptable to the EPA, ADEQ, and the City of Glendale, all documents required by this regulation.

B. Contractor warrants that its employees and Subcontractors of any tier and their employees shall at all times comply with all applicable laws, ordinances, statutes, rules and regulations set forth by all federal, state and local governments and the Arizona Department of Environmental Quality in connection with AZPDES Permitting requirements and laws and regulations pertaining to air, groundwater and surface water quality.

Fines and penalties imposed by the ADEQ against the City of Glendale or the Contractor, for Contractor's failure to comply with any of the requirements of AZPDES General Permit of Arizona, shall be borne by the Contractor.

11. **CONSTRUCTION MATERIALS SAMPLING AND TESTING, "BID ALTERNATE #1 ONLY":** The contractor, at their expense, shall provide adequate personnel for construction materials

sampling and testing functions as required by the City of Glendale. Proof of certifications of the following requirements shall be provided to the City of Glendale prior to commencement of construction:

A. **LABORATORY TESTING SERVICES:** Construction materials testing laboratories must meet the following requirements in order to perform laboratory testing on construction materials samples:

- a. Possess and maintain current AASHTO accreditation (including R18) provided by the AASHTO Materials Reference Laboratory (AMRL), and Cement and Concrete Reference Laboratory (CCRL) in any test methods performed and be currently participating in their respective proficiency programs.
- b. Concrete strength testing must be performed by a technician currently certified by the American Concrete Institute (ACI) as a "Concrete Strength Testing Technician".

B. **FIELD TESTING AND SAMPLING SERVICES:** Field technicians shall be employed by the construction materials testing laboratory noted above and have current "*Field Technician Certification*" from the Arizona Technical Testing Institute (ATTI) and current "*Concrete Field Testing Technician – Grade 1*" certification from the American Concrete Institute.

C. **TESTING FREQUENCIES:** Laboratory and field testing and sampling shall adhere to the current City of Glendale minimum frequencies (see tables below) formal documentation, records etc. shall be provided to the City in a timely manner and as part of required project documentation for overall project acceptance. The City reserves the right to utilize independent / additional testing to confirm prior results.

Payment for this item will be made at the contract lump sum price fully complete for CONSTRUCTION MATERIALS SAMPLING AND TESTING – BID ALTERNATE NO. 1.

CITY OF GLENDALE - CONSTRUCTION ENGINEERING				
MATERIALS TESTING SECTION				
ASPHALTIC CONCRETE MINIMUM SAMPLING AND TESTING FREQUENCY				
TYPE OF SAMPLE	REQUIRED TEST(S)	TEST METHOD DESIGNATION	MINIMUM SAMPLE FREQUENCY	MINIMUM SIZE OF SAMPLE
COLD FEED AGGREGATE OR COMBINED HOT-BIN AGGREGATE SAMPLES	SIEVE ANALYSIS	A.S.T.M. C - 136	1 - EVERY 500 TONS	25Kg
	SAND EQUIVALENT	A.S.T.M. D - 2419	1 - PER DAY	10Kg
	SPECIFIC GRAVITY (COARSE & FINE)	A.S.T.M. C-127 / C-128	1 - PER DAY	12Kg
	SIEVE ANALYSIS	A.S.T.M. C - 136	1 - PER EACH ADDITIONAL 500 TONS PRODUCED	25Kg
UNCOMPACTED ASPHALTIC CONCRETE MIXTURE	IGNITION-GRADATION	ARIZ.427	1 - PER FIRST 500 TONS PER DAY	9 Kg
	GYRATORY COMPACTION	AASHTO TP4	1 - PER FIRST 500 TONS PER DAY	9 Kg
	MAX. THEORETICAL SPECIFIC GRAVITY	A.S.T.M. D - 2041	1 - PER FIRST 500 TONS PER DAY	7 Kg
	IGNITION-GRADATION	ARIZ.427	1 - PER EACH ADDITIONAL 500 TONS PRODUCED	9 Kg
	MARSHAL COMPACTION	ASTM D-6926/D6927	1 - PER FIRST 500 TONS PER DAY	9 Kg
COMPACTED ASPHALTIC CONCRETE MIXTURE	NUCLEAR DENSITY	A.S.T.M. D - 2950	1 - PER 750 LINEAR FT PER PASS OR RIBBON	N/A
	SPECIFIC GRAVITY BY CORE SAMPLE	A.S.T.M. D - 2726	1 - PER 750 LINEAR FT PER PASS OR RIBBON	N/A

revised 1/07/2013

City of Glendale				
Minimum Construction Materials Field Testing Frequency				
Type of Material	Type of Structure	Minimum Test Frequency	Minimum Test Requirement	Test Method
Native In-Situ	Curb, Gutter & Sidewalk	1-per 500 lin.ft.	90% & +2 -4% of optimum moisture	ASTM D-698 / D-2922
Native In-Situ	Roadway Subgrade	1-per 500 lin.ft.	95% & +2 -4% of optimum moisture	ASTM D-698 / D-2922
Native In-Situ	Trench Backfill	1-per 500 lin.ft. per 1 ft. lift	95% & +2 -4% of optimum moisture	ASTM D-698 / D-2922
Native In-Situ	Structural Fill	1-per lift	95% & +2 -4% of optimum moisture	ASTM D-698 / D-2922
Native In-Situ	Driveways, Aprons, Valley Gutters	1- per structure	95% & +2 -4% of optimum moisture	ASTM D-698 / D-2922
Aggregate Base	Pipe Bedding	1-per 500 lin.ft.	95%	ASTM D-698 / D-2922
Aggregate Base	Curb, Gutter & Sidewalk	1-per 500 lin.ft.	95%	ASTM D-698 / D-2922
Aggregate Base	Roadway Base	1-per 500 lin.ft.	100%	ASTM D-698 / D-2922
Aggregate Base	Structural Fill	1-per lift	95%	ASTM D-698 / D-2922
Concrete	Curb, Gutter, Sidewalk, Driveways	1 set per 50 yards or 1/2 days pour	1 set of (4) 4X8 Cylinders	ASTM C-71 / C-172
Asphaltic Concrete	Roadway (Arterial)	1-per 750 lin.ft. per pass	92% - Nuclear Density	ASTM D-2950 / D-2041
Asphaltic Concrete	Roadway (Arterial)	1-per 750 lin.ft. per pass	92% - Core Density	ASTM D-2726
Asphaltic Concrete	Roadway (Residential)	1-per 750 lin.ft. per pass	95% - Marshall Density	ASTM D-6926/D6927
Asphaltic Concrete	Roadway (Residential)	1-per 750 lin.ft. per pass	95% - Core Density	ASTM D-2726
Asphaltic Concrete	Roadway	1 Sample per 500 tons	Uncompacted Field Sample	AC Laboratory Tests*

NOTE: This table is based on the approximate minimum number of tests to be performed and requirements may be increased depending on site conditions or other circumstances at the discretion of the City of Glendale.

* All Asphaltic Concrete Laboratory Tests are covered on another sheet provided upon request.

Revised 01/07/2013

12. **CASH FLOW REPORT:** The Contractor shall prepare a Cash Flow Report for projected monthly project cash flow on a City provided form and submit it for approval prior to issuance of the Notice to Proceed. The accumulation of monthly pay estimate costs shall be plotted versus time in accordance with the proposed construction schedule. After approval, the Contractor shall submit an updated Cash Flow Report prior to the receipt of each Progress Payment. Each updated Cash Flow Report shall reflect the Contractor's actual monthly payment versus the actual elapsed contract time.

At the City's request, if the projected quarterly project cash flow varies by more than ten percent of the total contract price, the Contractor shall prepare a revised Cash Flow Report. Each revised Cash Flow Report is subject to approval by the City prior to issuance of the progress payment.

Revisions to the report resulting from Contractor initiated delays or work schedule changes shall be at no cost to the City. Any revisions required by City initiated delays or changes to the work shall be paid as an integral part of the approved Change Order.

13. **CONSTRUCTION SIGN:** The project type to be indicated on the sign shall be 141513 - 2014/2015 PAVEMENT MANAGEMENT PROGRAM-SLURRY SEAL PHASE 1. See "Construction Sign Detail."

14. ALLOWANCE FOR CONSTRUCTION CONTINGENCIES: Bid schedule includes a lump sum contingency allowance. This allowance is at all times the property of the City and is for the sole purpose of reimbursing Contractor for any unforeseen work not apparent at the time of bidding or additional work requested by the CITY OF GLENDALE.

No work anticipated for reimbursement under this Bid Item shall be initiated by Contractor until Contractor, City of Glendale Representative and City of Glendale agree on the scope and cost to perform the additional work. The Contractor shall prepare and submit to City of Glendale Representative a cost itemization and summary for the additional work. City of Glendale Representative and City of Glendale shall review and approve prior to Contractor proceeding with any additional work. Any portion of the stated sum not expended remains the property of the City of Glendale.

Work under this section shall consist of any additional work identified by the owner and contractor due to construction activity. All work under this item shall be itemized as per MAG requirements and deducted from the set amount of \$100,000.00. All work under this section shall include but is not limited to all necessary materials, tools, layout, survey and labor required to complete each task.

Measurement and payment for this item shall be made on an individual basis per task and as described above. Limit for this item is set at \$100,000.00 on the bid form, under line item ALLOWANCE FOR CONSTRUCTION CONTINGENCY.

END OF SPECIAL PROVISIONS



Project Life Cycle Cash Flow Schedule

Project No.: _____

Date: _____

Project Name: _____

Company Name: _____

Project Start Date: Project Completion Date

Original Updated Revised

Qtr.	Fiscal Yr.	Estimated		Actual	
		Amount	Accum.	Amount	Accum.
1st	07/11 - 09/11				
2nd	10/11 - 12/11				
3rd	01/12 - 03-12				
4th	04/12 - 06/12				
1st	07/12 - 09/12				
2nd	10/12 - 12/12				
3rd	01/13 - 03/13				
4th	04/13 - 06/13				
1st	07/13 - 09/13				
2nd	10/13 - 12/13				
3rd	01/14 - 03/14				
4th	04/14 - 06/14				
1st	07/14 - 09/14				
2nd	10/14 - 12/14				
3rd	01/15 - 03/15				
4th	04/15 - 06/15				
1st	07/15 - 09/15				
2nd	10/15 - 12/15				
3rd	01/16 - 03/16				
4th	04/16 - 06/16				
Totals		\$ -	\$ -	\$ -	\$ -

* COG's fiscal year is July 1, (current year) through June 30, (following year)

For Engineering Use Only:	
Account No: _____	PO No. _____

CONSTRUCTION SIGN DETAIL

CONSTRUCTION SIGNS ARE TO BE IN PLACE BEFORE PHYSICAL CONSTRUCTION BEGINS

SIGNS SHALL BE MADE OF 3/4" AC EXTERIOR PLYWOOD OR OTHER MATERIAL APPROVED BY THE ENGINEER

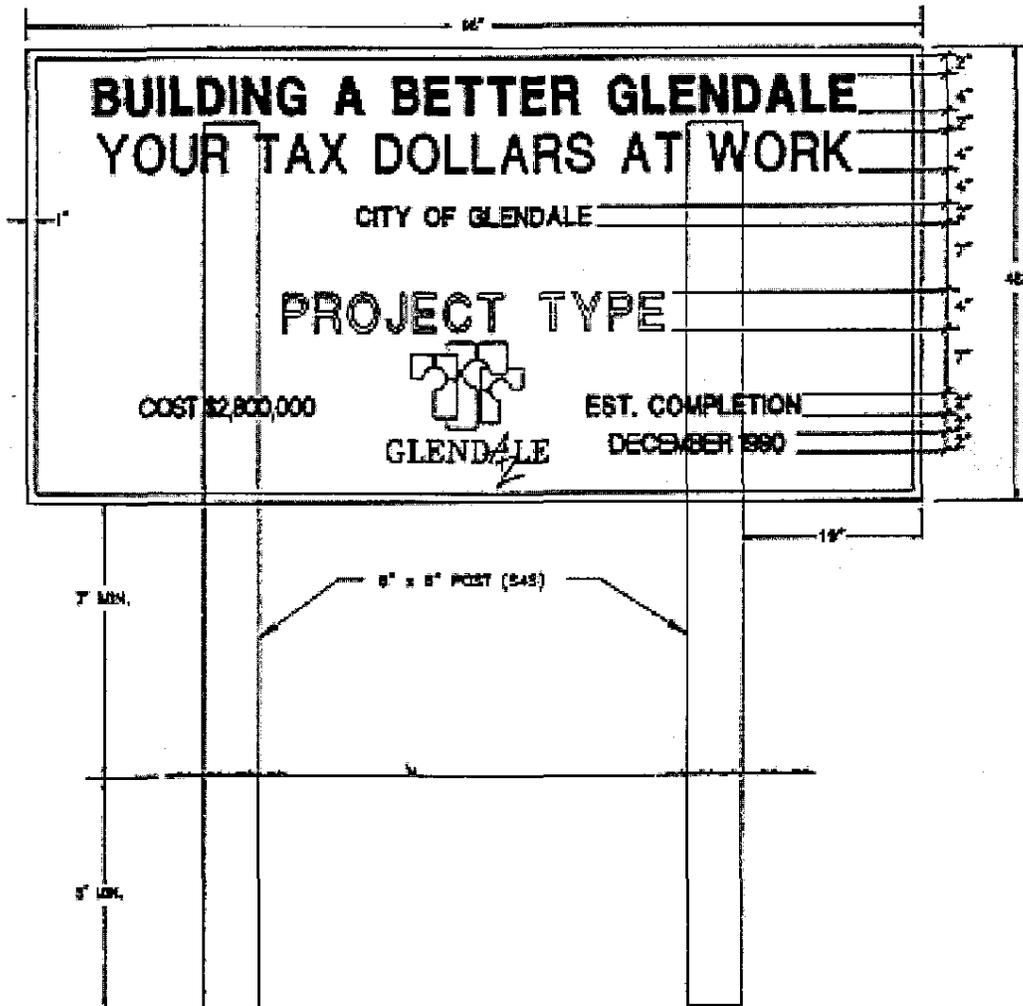
BACKGROUND TO BE PAINTED WHITE WITH STENCIL BLACK LETTERS, NUMERALS AND BORDER.

POSTS SHALL BE PAINTED WHITE. ALL MOUNTING HARDWARE TO BE RUST PROOF MATERIAL

SIGNS SHALL BE SO PLACED THAT THEY WILL NOT OBSCURE OR DETRACT FROM OTHER SIGNING.

CONTRACTOR TO FILL IN THE PROJECT TYPE, COMPLETION DATE, AND COST AS DIRECTED.

THE TWO COLOR GLENDALE LOGO IS AVAILABLE BY CONTACTING THE CITY OF GLENDALE ENGINEERING DEPT. AT 623-930-3630.



TECHNICAL SPECIFICATIONS

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APPENDIX F – ASPHALT REPAIR AREA IMPROVEMENT INDEX

PART A: SUPPLEMENTAL SPECIAL PROVISIONS

The following project special provisions are modified to add:

TRAFFIC REGULATIONS:

- 6.1.13. It is the preference of the City to avoid weekend and night construction work. Contractor must request one (1) week in advance from the City of any intended weekend work. The City's transportation Director and Project Manager will determine if such work shall be permitted. Contractor shall notify the public a minimum of three (3) days prior to performing any authorized weekend or night work. All public notifications shall be coordinated through the public outreach consultant.
- 6.1.14. A travel lane shall be defined as twelve (12) feet of roadway not obstructed by traffic control devices with a safe motor vehicle operating speed of twenty-five (25) miles per hour.
- 6.1.15. A travel lane will not be considered as open to traffic until it has been graded reasonably smooth and is paved with a minimum of two (2) inches of asphalt or as approved by the Transportation Director. This shall be considered temporary pavement and shall be removed completely before proceeding with final surfacing.
- 6.1.16. Intersection area shall be defined as all of the area within the right-of-way of intersecting streets, plus two-hundred fifty (250) feet beyond the center of the intersected streets on all legs of the intersection. If requested by the Contractor and reviewed and approved by the City, the City may allow weekend intersection closures. The Contractor must coordinate any closure schedule and approval through the City's Transportation Director and Project Manager.
- 6.1.17. The Contractor shall maintain local access to all side streets, access roads, driveways, alleys, and parking lots at all times and shall notify residents 48 hours in advance of any restrictions which will affect their access. The Contractor shall restore the access as soon as possible. If the primary access cannot be restored in a timely manner, the Contractor shall provide an alternative which shall be predetermined with the residents prior to imposing any restrictions. Any local street restrictions imposed shall be such that local area traffic circulation is maintained.
- 6.1.18. Access shall be maintained to adjacent businesses at all times during their hours of operation. Properties having more than one point of access shall not have more than one access restricted for more than fourteen (14) calendar days at any given time. Access to adjacent driveways shall be provided during all non-

working hours. Any business restrictions shall be coordinated with the affected business at least 48 hours prior to imposing restrictions.

- 6.1.19. The Contractor shall provide clean and safe school zones, crosswalks, and walkways for students attending nearby schools during all hours of school use. In addition to school zones and crosswalks, the Contractor shall maintain accessibility to all school bus routes during all hours of school use. The Contractor shall notify the school Principal(s) and the school administration office at least 48 hours prior to any restrictions; and shall restore access as soon as possible. All work in front of schools and adjacent to school property shall be completed between the hours of 9 AM to 3 PM if school is in session.
- 6.1.20. The Contractor shall maintain emergency vehicle access at all times.
- 6.1.21. The Contractor shall maintain access to all Parks during park hours. The Contractor shall coordinate with the Parks Department 48 hours or more prior to any restrictions, and shall restore access as soon as possible.
- 6.1.22. Contractor shall coordinate slurry operations so as to not impact sanitation services by sequencing slurry operations to occur on any given roadway segments with sanitation service scheduled for that day. Should slurry operations be scheduled for any given roadway segment with sanitation service scheduled for that day, the Contractor shall coordinate and provide sanitation pick up for affected residents by relocating trash containers, or by providing alternative measures acceptable to the Solid Waste Division of the City Public Works Department. At any time project construction shall require the closure or disruption of traffic in any roadway, alley, or refuse collection easement such that normal refuse collection will be interrupted, the Contractor shall, prior to causing such closure or disruption, make arrangements with the City of Glendale Solid Waste Division in order that refuse collection Service can be maintained.
- 6.1.23. The Contractor shall maintain all existing bus stop locations on this project in a safe manner, or provide alternate bus stop locations and related directional signage as required by the Public Works Operations Manager or her designee.
- 6.1.24. The Contractor shall maintain pedestrian paths that meet ADA requirements at all times during the entire length of the project. The Contractor shall ensure that all pedestrian walking areas on this project remain in compliance with all the requirements outlined by all current American Disabilities Act regulations. All pedestrian-walking areas, whether paved or unpaved, shall be maintained open and safely usable at all times. Such measures as backfilling or ramping at a 12:1 slope to existing sidewalks, or providing alternate sidewalk areas adjacent to existing sidewalks may be used. In high pedestrian use areas, the Transportation

Director or her designee may request temporary hard-surface walkways, and/or covered pedestrian walkways to be installed at no additional cost to the City.

The following special provisions are added to the project special provisions:

QUALIFICATIONS OF BIDDERS: Bidders shall be experienced with crack sealing and polymer modified slurry seal application. As evidence of competency to perform the work, bidder shall submit, with his/her Bid, a list of at least three, most recent, each for crack sealing and polymer modified slurry seal projects of similar size, scope, and quantity completed within the last 48 months. The project list shall show the name of the project, name of the owner, address, telephone number of an appropriate party to contact, date and linear feet / square feet application in each case.

CONSTRUCTION SEQUENCING / SCHEDULE: The Contractor shall complete all work shown on the maps in a logical sequence to complete the project in an efficient manner. Contractor construction sequencing schedule shall be approved by the City prior to commencing construction. Additionally, the Contractor shall schedule traffic closures or restrictions around the schedule of all local schools.

STOCK PILE LOCATIONS: The Contractor shall be responsible for securing and maintaining a marshalling yard as specified in MAG Standard Specification Sections 104.1.3, 104.1.4, and 107.6.1.

- A. MAG 107.6.1 "**Contractor's Marshaling Yard:** If the Contractor or his subcontractor utilizes property outside the limits of the project in the performance of the contract, the Contractor/subcontractor shall comply with the following:

107.6.1.1 Contractor's Marshaling Yard when the Agency is the Contracting Party:

(A) Prior to occupying the property, the Contractor shall provide written notification as to the number and location of all properties to be used. The notification shall specify in detail how the Contractor proposes to use each property and how he proposes to comply with (B) through (D) below. Also, the Contractor shall provide a statement, signed by the property owner(s), which gives the Contractor permission to use the property. (B) The property(s) shall be adequately maintained to control dust, mud, trash and other pollutants from leaving the property. (C) Work on the property(s) shall be scheduled so as to comply with the City of Glendale Noise Ordinance. (D) Use of the property(s) such as location of stored materials, service of equipment, etc., shall be conducted to minimize impact on adjacent properties. (E) The Contractor shall leave the property in a condition, as determined by the Engineer, equivalent to that which existed prior to entry. In no case shall any use cause, or allow to remain, any negative impact to

adjoining properties or right-of-way unless such impact existed prior to the Contractors' use. (F) The Contractor shall obtain a written release signed and dated from each property owner after completion of use. Each release shall state that, at the time of signing, the owner accepts the property in its present condition from the Contractor and relieves the Contractor and the Agency from any or all claims for the use or damage to said property. A copy of each release shall be submitted to the Engineer. (G) This Subsection also applies to all levels of subcontractors who will need to obtain marshaling yards for the project, which will be separate from that of the Contractor. It will be the responsibility of the Contractor to obtain copies of the various documents from the subcontractors, as required above, and provide them to the Engineer.

B. MAG 107.6.1.2 Contractor's Marshaling Yard when the City of Glendale is not the Contracting Party (private development, utility work, subdivision construction, etc): All conditions will apply as in Subsection 107.6. 1.1 except that the permit holder will be responsible for obtaining all documents. The permit holder will retain the documents and make them available to the Agency upon request.

C. MAG 107.6.2 The Contractor shall comply with the City of Glendale Code concerning work hours and noise level during construction.

SAWCUTTING & REMOVALS: Sawcutting, as well as removal and disposal of any and all asphalt and/or concrete is incidental to the project construction scope.

SAFETY AND DAILY CLEANUP: The contractor shall remove all debris and other deleterious construction material materials from the worksite on a daily basis. The Contractor shall at all times so conduct his work as to assure the least possible obstruction to traffic and adjacent residents. The Contractor shall provide for the safety, convenience, and the protection of persons and property, of the general public, and residents along the street, highway, and areas adjacent to the work area.

PUNCH LIST ITEMS: The Contractor shall complete all punch list items 30 days after punch list is received by Contractor from the City.

CONSTRUCTION QUANTITIES: The Contractor shall accompany the City of Glendale engineer or their representative during measurement of all construction quantities.

END OF SUPPLEMENTAL SPECIAL PROVISIONS

PART B: BID ITEMS

The following bid items are numbered to correspond to the Schedule of Bid Items. They are included to explain details of work not covered by applicable Standard Specifications and to relate work and pay quantities to the specific Bid Item. Any work shown on the plans and not included in a bid item shall be considered incidental to the project.

ITEM 1 MOBILIZATION/DEMobilIZATION**Description:**

Mobilization/demobilization shall include movement of Contractor's personnel, equipment, supplies and incidentals, including establishment of offices, buildings and other facilities required for the performance of the work on the project, as well as preparatory work and operations prior to the commencement of the work on the project locations.

Measurements and Payment:

Mobilization/demobilization will be measured for payment by the lump sum as a single complete unit of work. Payment for mobilization/demobilization will be made at the contract lump sum price. Payment shall be made in equal one-third portions. The first payment will be paid with the Contractor's initial billing. The second payment will be made when the total payments to the Contractor for the pay items, exclusive of payments for mobilization/demobilization, equal greater than one-half of the initial contracted amount, exclusive of mobilization/demobilization. The remaining one-third will be paid as part of the final payment due to the Contractor.

ITEM 2 PROJECT SIGNS**Description:**

The contractor shall provide a minimum of two (2) portable signs at each work location, minimum size 48" x 30" with the following information – City of Glendale 2015 Slurry Seal Program, Project Hotline XXX-XXX-XXXX. (Phone number to be provided by the City at Preconstruction Conference). Signs shall be in place at each location prior to the start of construction, placed to be visible to motorists and kept clean.

Measurement and Payment:

Project signs will be measured for payment on lump sum basis and paid at the price established in the Bid Scheduled for all labor, materials, tools and equipment to complete the work.

ITEM 3 ASPHALT REPAIR (REMOVE/REPLACE), 12.5mm**Description:**

The work described herein shall consist of sawcutting asphalt to limits marked in the field, removal of full depth asphaltic concrete, cleaning debris from existing sub-grade, remove (as necessary), scarify and re-compact existing subgrade to minimum MAG compaction requirements, and placement of new 1/2" (12.5 mm) asphaltic concrete to match existing depth of minimum 3" depth whichever is greater.

All asphalt remove/replace locations shall not extend into curb, gutter, sidewalk, valley gutter or other existing improvements.

Location of Work:

All asphalt repair areas indicated on the project improvement exhibits have been marked in the field with white marking paint. All areas shall be field verified by the Contractor prior to commencing construction and any areas unable to be located by Contractor shall be brought to the attention of the City of Glendale prior to proceeding. The City reserves the right to make additions or deletions to the original quantity amount, and/or to the streets or number of streets, at the price bid per square yard.

Asphaltic Concrete Mix Designs:

Asphalt mix designs shall be prepared and submitted for approval in accordance with the current version of MAG Uniform Standard Specifications and Details for Public Works Construction Section 710 "Asphalt Concrete".

Asphalt concrete shall be produced and placed in accordance with MAG Section 321 "Placement and Construction of Asphalt Concrete Pavement".

The designation for asphalt concrete mixes shall be based on the nominal maximum aggregate size of the mix as indicated in the MAG Uniform Standard Specifications. The applicable mix designations are 3/8 inch (9.5mm), 1/2 inch (12.5mm), 3/4 inch (19mm) and Base 1" (25mm) mix.

Gyratory mixes shall be used for high / intermediate traffic conditions, Marshall Mixes for low traffic conditions. High / intermediate traffic conditions are conditions where the asphalt mix will be subject to higher volumes and/or heavier weight vehicle usage such as found on major arterial, collector, and commercial streets. Low traffic conditions are conditions where the asphalt mix will be subject to lower volumes and lower weight vehicle usage. Examples of low traffic conditions are residential streets, most parking lots and residential minor collector streets. When in dispute, street classifications (i.e. minor, collector, major collector) shall be determined by the City of Glendale or as dictated on project plans.

The following table (MAG Table 710-1) displays the recommended lift thickness for various

asphalt concrete mix designations found within MAG Section 710. Please note that these recommended lift thicknesses are minimums based on each mix designation's "Nominal Aggregate Size" and the relative coarseness of its gradation. The compacted thickness of layers placed shall not exceed 150% of the Minimum Lift Thickness of Table 710-1 (below) except as otherwise provided in the plans and specifications, or if approved in writing by the Engineer.

Table 710-1		
RECOMMENDED MINIMUM LIFT THICKNESS'S for ASPHALT CONCRETE MIXES		
Asphalt Concrete Mix Designation (inches)	Minimum Lift Thickness Marshall Mixes	Minimum Lift Thickness Gyratory Mixes
3/8"	1.0"	1.5"
1/2"	1.5"	2.0"
3/4"	2.5"	3.0"
BASE	3.0"	n/a

Asphaltic Concrete Material Sampling & Testing:

The Contractor, at their expense, shall provide adequate personnel for construction materials sampling and testing for asphaltic concrete, as required by the City. Laboratory and field testing and sampling shall adhere to the current City of Glendale minimum frequencies of the Special Provisions). Formal documentation, records etc. shall be provided to the City in a timely manner and as part of required project documentation for overall project acceptance. The City reserves the right to utilize independent / additional testing to confirm prior results.

Measurement:

Asphalt remove/replace shall be measured by the square yard defined by the sawcut lines.

Payment:

The accepted quantities of asphalt remove/replace, measured as provided above, will be paid for at the contract unit price per square yard, which price shall be full compensation for the work, complete in place, with no allowance for waste, and shall include labor, equipment, tools, and incidentals to complete the work as prescribed and as directed by the Engineer. Saw cutting shall be considered incidental to this bid item and will not be paid separately.

No payment will be made for materials rejected due to improper placement, improper proportions of materials, or material found to be defective or out of specifications. Contractor shall remove and replace rejected material at their own cost.

ITEM 4 CRACK SEAL**Description:**

The work described herein shall consist of an application of hot applied, single component polymer modified asphalt rubber, supplied in solid form used to seal cracks or joints in asphalt concrete pavements. Cracks or joints that will be sealed shall be a minimum of ¼ inch wide at time of work, and have a maximum width of 1 inch.

Location of Work:

The streets to have crack sealing applied are indicated on the project improvement exhibits. All cracks meeting the requirements of this specification on each street identified shall be sealed. The estimated lengths include cul-de-sacs, elbow turns and curb returns. The City reserves the right to make additions or deletions to the original quantity amount, and/or to the streets or number of streets, at the price bid per linear foot.

Materials:

Materials shall be a premixed, single component mixture of asphalt cement, aromatic extender oils, polymers, and granulized rubber in a closely controlled manufacturing process. Materials will conform to the following specifications when heated in accordance to ASTM D5078 to the manufactures maximum safe heating temperatures. Prior to application, the Contractor shall submit certification of compliance to the Engineer for all materials to be used in the work.

TEST	TEST METHOD	SPECIFICATION LIMITS
Cone Penetration	ASTM D5329	20-40
Resilience	ASTM D5329	30% Minimum
Softening Point	ASTM D113	210°F (99°C) Minimum
Ductility, 77F (25C)	ASTM D113	30 cm Minimum
Flexibility	ASTM D3111 *Modified	Pass at 30°F (-1°C)
Flow 140°F (60°C)	ASTM D5329	3 mm Maximum
Brookfield Viscosity, 400°F (204°C)	ASTM D2669	100 Poise Maximum
Asphalt Compatibility	ASTM D5329	Pass
Bitumen Content	ASTM D4	60% Minimum
Tensile Adhesion	ASTM D5329	400% Minimum
Maximum Heating Temperature		400°F (204°C)
Minimum Heating Temperature		380°F (193°C)
*Specimen bent 90° over a 1-inch mandrel within 10 seconds		

Equipment:

The melter applicator unit shall be a self-contained double boiler device with the transmittal of heat through heat transfer oil. It must be equipped with an on board automatic heat controlling device to permit the attainment of a predetermined temperature, and then maintain that temperature as long as required. The unit shall also have a means to vigorously and

continuously agitate the sealant to meet the requirements of Appendix X1.1 of ATSM D6690. The sealant shall be applied to the pavement under pressure supplied by a gear pump with a hose and wand and direct connecting applicator tip. The pump shall have sufficient pressure to apply designated sealant at a rate of at least three (3) gallons (11.4 L) per minute. Melter applicators shall be approved for use by the sealant manufacturer.

Application:

The sealant shall be applied in the crack or joint reservoir uniformly from bottom to top and shall be filled without formation of entrapped air or voids.

The crack or joint shall be slightly overfilled then leveled with a 3" sealing disk or v-shaped squeegee to create a neat band aid extending ± 1 " on each side of the crack or joint for surface strength and waterproofing. The band aid shall not be more than 1/8 inch in thickness above the pavement surface.

Cleaning and Preparing Cracks or Joints:

Prior to application of polymer modified asphalt rubber, all cracks or joints shall be cleaned out of any debris and dust. As directed by the Engineer, final cleaning of the cracks or joints shall be vacuumed.

Vacuuming: Final cleaning shall thoroughly clean cracks and joints to a minimum of 1". The vacuum unit shall use high pressure 90 psi (620 kPa) minimum, dry, oil free compressed air to remove any remaining dust, directly attached to a vacuum unit to collect the dust and residue. Both sides of the crack or joint shall be cleaned. Surfaces will be inspected to assure adequate cleanliness and dryness.

Opening to Traffic:

Material shall not be exposed to traffic until fully cured. If sealed area must be open to traffic a blotter material can be applied to surface of polymer modified asphalt rubber.

Blotter: On two lane roads or where traffic may be likely to come in contact with the hot sealant before it cures, a blotter or specialized bond breaking material may be required to prevent asphalt bleeding and/or pickup of sealant by vehicular traffic. Blotter material should be compatible with crack sealant and any surface treatment being used.

Pavement Temperatures:

Polymer modified asphalt rubber shall be applied when pavement surface temperature exceeds 40°F (4°C). Lower temperatures may result in reduced adhesion due to the presence of moisture or ice. If pavement temperature is lower than 40°F (4°C), it may be warmed using a heat lance that puts no direct flame on the pavement. If installing at lower pavement temperatures than 40°F (4°C), extreme care should be used to insure that cracks or joints are dry and free from ice and other contaminants. Product temperatures should be maintained at

the maximum heating temperature recommended by the manufacture. If installing at night, ensure that dew is not forming on the pavement surface. Applied product should be checked by qualified personnel to ensure that adhesion is adequate.

Measurement:

Cleaning and sealing of cracks and joints shall be measured by the linear foot of cracks cleaned and sealed.

Payment:

The accepted quantities of crack sealing, measured as provided above, will be paid for at the contract unit price per linear foot, which price shall be full compensation for the work, complete in place, with no allowance for waste, and shall include labor, equipment, tools, and incidentals to complete the work as prescribed and as directed by the Engineer.

No payment will be made for materials rejected due to improper placement, improper proportions of materials, or material found to be defective or out of specifications.

ITEM 5 SLURRY SEAL

Description:

Polymer Modified Slurry Seal shall consist of mixing a polymer modified cationic asphalt emulsion (LMCQS-Ih or PMCQS-Ih), aggregate, mineral filler (as needed), set-control additives (as needed), and water, spreading the mixture on a pavement surface where shown on the plans, in conformance with the provisions in these special provisions, and as directed by the Engineer. The completed Slurry Seal shall leave a homogeneous mat, adhere firmly to the prepared surface, have a uniform appearance and have a skid-resistant surface. The completed Polymer Modified Slurry Seal shall support controlled traffic in 60 minutes.

All streets identified in these bid documents and improvement exhibits to receive Single Slurry shall have Type II Slurry (as described in this specification) applied. See the attached improvement exhibits for slurry application areas.

The work performed and materials used in this project shall be in accordance with the Uniform Standard Specifications and Details for Public Works Construction sponsored and distributed by the Maricopa Association of Governments (MAG) with the following additions:

Location of Work:

The streets to have polymer modified slurry seal applied are indicated on the project improvement exhibits. The slurry seal shall be applied from lip or face of gutter to lip or face of gutter and across the full pavement width on all streets indicated to have application. The estimated areas include cul-de-sacs, elbow turns and curb returns. The City reserves the right to make additions or deletions to the original quantity amount, and/or to the streets or number of

streets, at the price bid per square yard.

Slurry seal application limits shall begin from the point of curvature (PC)/curb return of the intersecting arterial, collector or local street, or the valley gutter (where applicable), on the roadways identified to be receive slurry.

Non-Compliance:

If any two successive tests fail on the stockpile material, the job shall be stopped. It is the responsibility of the contractor, at his own expense, to prove to the City of Glendale that the conditions have been corrected. If any two successive tests on the mix from the same machine fail, the use of the machine shall be suspended. It will be the responsibility of the contractor, at his own expense, to prove to the City of Glendale that the problems have been corrected and that the machine is working properly.

- Test report and certifications will be made in accordance with MAG Specifications and these special provisions.
- Particular Section of the MAG Specifications which Apply.
- Specification for Polymer Modified Slurry Seal (Type II)

Materials:

The materials for polymer modified slurry seal shall conform to the following requirements

Emulsified Asphalt: The polymer modified cationic asphalt emulsion shall be homogenous and shall conform to the requirements of these special provisions. The polymer shall be either solid polymer milled or blended into the asphalt or latex blended into the emulsifier solution prior to the emulsification process. The polymer modified cationic asphalt emulsion shall contain a minimum of two (2) percent polymer and be either grade LMCQS-1h or PMCQS-1h as shown in these special provisions and shall conform to the following requirements when tested in conformance with the following test methods:

Latex Modified Cationic Quick Set (LMCQS-1h)		
Tests on Emulsion		
Specification Designation	Test Method	Requirement
Viscosity, SFS, 77°F, seconds	AASHTO T 59	15-100
Sieve Test, %	AASHTO T 59	0.10 max.
Storage Stability, 24 hr, %	AASHTO T 59	1.0 max
Particle Charge	AASHTO T 59	Positive
Residue by Evaporation, %	AASHTO T 59	60 min.

Tests on Residue from Vacuum Distillation (Ariz. 504)		
Specification Designation	Test Method	Requirement
Penetration, 77°F, 100g, 5s, dmm	AASHTO T 49	20-90
Ring and Ball Softening Point, °F	AASHTO T 53	130 min.
Ductility, 77°F, 5cm/min, cm	AASHTO T 51	40 min.
Solubility in TCE, %	AASHTO T 44	97.5 min.
Elastic Recovery, %	AASHTO T 301	55 min.

A sample of the emulsion left undisturbed for a period of 24 hours shall show no evidence of latex separation.

Polymer Modified Cationic Quick Set (PMCQS-1h)		
Tests on Emulsion		
Specification Designation	Test Method	Requirement
Viscosity, SFS, 77°F, seconds	AASHTO T 59	15-100
Sieve Test, %	AASHTO T 59	0.10 max.
Storage Stability, 24 hr, %	AASHTO T 59	1.0 max
Particle Charge	AASHTO T 59	Positive
pH Test	AASHTO T 200	6.7 max
Density, 60 °F, lbs/gallon	AASHTO T 59	Report
Residue by Evaporation, %	AASHTO T 59	57 min.
Tests on Residue from Vacuum Distillation (Ariz. 504)		
Specification Designation	Test Method	Requirement
Penetration, 77°F, 100g, 5s, dmm	AASHTO T 49	35-75
Penetration, 39.2°F, 200g, 60s, dmm	AASHTO T 49	15 min.
Absolute Viscosity, 140 °F, Poise	AASHTO T 202	3000 max.
Ring and Ball Softening Point, °F	AASHTO T 53	130 min.
Ductility, 77°F, 5cm/min, cm	AASHTO T 51	100 min.
Solubility in TCE, %	AASHTO T 44	97.5 min.
Elastic Recovery, %	AASHTO T 301	55 min.

Water and Additives: Water shall be of such quality to be miscible with the polymer modified cationic asphalt emulsion. Additives may be used to accelerate or retard the break and set such as to insure that the applied Slurry mixture can support controlled vehicular traffic within one (1) hour after application. The kind and amount shall be determined based on the approved job mix formula and field test results as required by the Engineer. Set-control additives shall not adversely affect the polymer modified slurry seal.

Mineral filler: Mineral filler shall be Portland cement or hydrated lime that is free of lumps. Portland cement shall be Type I, Type II, or combination thereof. The type of mineral filler shall be determined by the Contractor based on laboratory evaluation to develop the job mix formula.

Aggregate: The mineral aggregate used shall be of the type and grade specified for the particular use of the polymer modified slurry sea l. Mineral aggregate shall consist of

sound and durable crushed gravel or crushed stone. The material shall be free from organic matter and other deleterious materials. Aggregates shall be 100% crushed material with no rounded particles. All aggregate shall be free of caked lumps and oversize particles. No natural sand will be allowed.

The aggregate, prior to the addition of emulsion shall conform to the requirements of this section. If aggregates are blended each component aggregate shall meet the sand equivalency and abrasion resistance and shall be 100% crushed. The percentage composition by mass of the aggregate shall conform to the following grading requirements when tested in conformance with AASHTO T 11 and T 27.

TYPE II	
Sieve Sizes	Percentage Passing
3/8" (9.5-mm)	100
No. 4 (4.75-mm)	90-100
No. 8 (2.36-mm)	65-90
No. 16 (1.18-mm)	45-70
No. 30 (600- μ m)	30-50
No. 50 (300- μ m)	18-30
No. 100 (150- μ m)	10-21
No. 200 (75- μ m)	5-15

The aggregate shall conform to the following quality requirements:

Test	Test Method	Requirement
Sand Equivalent	AASHTO T 176	60 min.
Plastic Limit	AASHTO T 89/T90	Non-Plastic
Percentage of Crushed Particles	Ariz. 212	100% min.
Los Angeles Abrasion Loss at 500 Rev.	AASHTO T 96	35% max.

Notes: Los Angeles Abrasion shall be performed on the source aggregate before crushing. Source testing performed within the last 12 months may be provided by the aggregate supplier.

Job Mix Formula

All materials shall be pre-tested in a certified laboratory, selected by the City, as to the materials suitability for use in the Polymer Modified Slurry Seal. At least seven (7) working days before the polymer modified slurry seal placement commences, the contractor shall submit for approval of the Engineer a laboratory report of tests and a proposed Job Mix Formula covering the specific materials proposed for use on the project. The Job Mix Formula proposed shall be reviewed and sealed by a registered Professional Engineer in the State of Arizona, seal date shall be within previous 12 months.

The percentages of each individual material proposed in the Job Mix Formula shall be shown in the laboratory report. Individual materials shall be within the following limits:

Material	Limit
Residual Asphalt (Type II)	7.5% to 13.5% by Dry Mass of Aggregate
Mineral Filler	0% to 3% By Dry Mass of Aggregate
Additive	As Needed
Water	As Needed

Adjustments may be required during construction based on field conditions.

Specifications: The Job Mix Formula and aggregate tests shall be performed by a laboratory capable of performing the applicable International Slurry Surfacing Association (ISSA) tests. The proposed polymer modified slurry seal mixture shall conform to the specified requirements when tested in conformance with the following tests:

Test	ISSA Test Method	Requirements
Wet Cohesion, kg-cm @ 30 Minute (Set) @ 60 Minute (Traffic)	TB* 139	12 min. 20 min.
Excess Asphalt by Monolayer Loaded Wheel Test, g/ft ²	TB* 109	50 max.
Wet Stripping, %	TB* 114	90 min.
Consistency, cm	TB* 106	2-3
Wet Track Abrasion, g/ft ² 1-hour Soak Loss 6-day Soak Loss	TB* 100	50 max. 75 max.
Mix Time @ 77°F, seconds	TB* 113	180 min.

TB* = Technical Bulletin

The laboratory that performed the tests and designed the mixture shall sign and seal the laboratory Job Mix Formula report. The report shall show the results of the tests on individual materials and shall compare their values to those required by these special provisions. The report shall clearly show the proportions of aggregate, filler, water, set control additive, and polymer modified cationic asphalt emulsion solids content (minimum and maximum) based on the dry mass of aggregate. The laboratory shall report the quantitative effects of moisture content on the unit mass of the aggregate (bulking effect) in conformance with the requirements of ASTM Designation C 29M. Previous laboratory reports covering the same materials may be accepted provided the material test reports were completed within the previous 12 months as well as sealed within the previous 12 months.

The component materials used in the Job Mix Formula shall be representative of the polymer modified slurry seal materials proposed by the Contractor for use on the project. Once the Job Mix Formula is approved by the Engineer, no substitution of other material will be permitted unless the materials proposed for substitution are first tested and a laboratory report is submitted for the substituted design in conformance with these

special provisions. Substituted materials shall not be used until the Job Mix Formula for those materials has been approved by the Engineer.

The completed mixture, after addition of water and set control additives, if used, shall be such that the polymer modified slurry seal mixture has proper workability. At the expiration of the road closure time, in conformance these special provisions, the polymer modified slurry seal mixture shall be sufficiently cured to support unrestricted traffic.

Material Sampling and Quality Acceptance

The minimum acceptable sampling frequency shall be at the Engineers direction and shall include:

Polymer Modified Cationic Asphalt Emulsion
Mineral Aggregate
Polymer Modified Slurry Seal Mixture

1. Polymer Modified Cationic Asphalt Emulsion shall be tested for compliance to the applicable specification in this special provision. At the Engineers discretion the polymer modified cationic asphalt emulsion can be tested for compliance with selected performance indicating portions of the specification.
2. The mineral aggregate shall be tested for gradation and Sand Equivalent in accordance with these special provisions
3. The polymer modified slurry seal mixture shall be tested for Wet Cohesion, Wet Track Abrasion Loss (1-hour and 6-day soaks) and Excess Asphalt. Additional testing for residential asphalt content may be requested by the Engineer.

Test	ISSA Test Method	Requirements
Wet Cohesion, kg-cm @ 30 Minute (Set)	TB* 139	12 min.
Excess Asphalt by Monolayer Loaded Wheel Test, g/ft ²	TB* 109	50 max.
Wet Track Abrasion, g/ft ² 1-hour Soak Loss 6-day Soak Loss	TB* 100	50 max. 75 max.
Residue Asphalt Content	AASHTO T164	Range from Job Mix Formula

TB* = Technical Bulletin

4. Sampling: Samples of polymer modified cationic asphalt emulsion shall be obtained from the job site storage tank or the polymer modified slurry seal application truck. Aggregate samples shall be obtained from the project stockpile. Inspector shall observe the sampling of one (1) gallon of the emulsion and a representative sample of slurry seal aggregate. Contractor shall provide the samples and container to the inspector. Sampling of the polymer modified cationic asphalt emulsion shall be in accordance with AASHTO T40. Sampling of the mineral aggregate shall be in accordance with AASHTO T2.

Samples of the polymer modified slurry seal mixture shall be obtained from the pug mill discharge prior to the polymer modified slurry seal entering the lay down box and shall be of adequate size to fabricate all test specimens from one sample.

The Engineer or his representative shall be permitted to take samples of materials from the project at any time. The City may elect to perform testing on the samples to verify compliance of the materials with the Specifications.

5. Testing shall be under taken by the Engineer whenever deemed necessary. The Engineer, or his representative, may suspend the application of the polymer modified slurry seal whenever changes in the materials or quality of the applied polymer modified slurry seal are noted. Work shall resume only when the noted deficiencies are corrected to the satisfaction of the Engineer. When work is suspended for this reason, samples will be taken immediately.

The Engineer may send samples to a testing laboratory. Testing will be at the City's expense unless deficiencies are verified by the testing. The contractor shall reimburse the City for the cost of any testing required by deficient materials or application of the polymer modified slurry seal.

Proportioning

Aggregate, mineral filler, polymer modified cationic asphalt emulsion, water, and additives, including the set-control agent, if used, shall be proportioned by volume utilizing the Job Mix Formula approved by the Engineer. If more than one kind of aggregate is used, the collect amount of each kind of aggregate to produce the required grading shall be proportioned separately, prior to adding the other materials of the mixture, in a manner that will result in a uniform and homogeneous blend.

1. The aggregate shall be proportioned using a belt feeder operated with an adjustable cutoff gate. The height of the gate opening shall be determinable. The polymer modified cationic asphalt emulsion shall be proportioned by a positive displacement pump. Variable rate emulsion pumps, if used, shall be calibrated and sealed in the pump's calibrated condition in conformance with ISSA MA-I standards

The delivery rate of aggregate and polymer modified cationic asphalt emulsion per revolution of the aggregate feeder shall be calibrated at the appropriate gate settings for each mixer-spreader truck used on the project in conformance with ISSA MA-I and in conformance with the provisions of these special provisions.

The aggregate belt feeder shall deliver aggregate to the pugmill with such volumetric consistency that the deviation for any individual aggregate delivery rate check-run shall not exceed 2.0 percent of the mathematical average of 3 runs of at least three tons each. The emulsion pump shall deliver polymer modified cationic asphalt emulsion to the pugmill with such volumetric consistency that the deviation for any individual delivery

rate check-run shall be within 2.0 percent of the mathematical average of 3 runs of at least 300 gallons each. The water pump shall deliver water to the pugmill with such volumetric consistency that the deviation for any individual delivery rate check-run shall be within 2.0 percent of the mathematical average of 3 runs of at least 300 gallons each.

2. The polymer modified cationic asphalt emulsion storage tank shall be located immediately before the emulsion pump and shall be equipped with a device which will automatically shut down the power to the emulsion pump and aggregate belt feeder when the polymer modified cationic asphalt emulsion level is lowered to a point where the pump suction line is exposed.

A temperature-indicating device shall be installed in the emulsion storage tank at the pump suction level. The device shall indicate the temperature of the polymer modified cationic asphalt emulsion and shall be accurate to within 10°F.

3. The belt delivering the aggregate to the pugmill shall be equipped with a device to monitor the depth of aggregate being delivered to the pugmill. The device for monitoring the depth of aggregate shall automatically shut down the power to the aggregate belt feeder whenever the depth of aggregate is less than the target depth of flow. A second device shall be located where the device will monitor the movement of the aggregate belt by detecting revolutions of the belt feeder. The devices for monitoring no flow or belt movement shall automatically shut down the power to the aggregate belt when the aggregate belt movement is interrupted. The device to detect revolutions of the belt feeder will not be required where the aggregate delivery belt is an integral part of the drive chain. To avoid erroneous shutdown by normal fluctuation, a delay of 3 seconds will be permitted between sensing and shutdown of the operation.

Mixing and Spreading Equipment

The polymer modified slurry seal shall be mixed in a continuous flow pugmill mixer of adequate size and power for the type of polymer modified slurry seal to be placed. The aggregate shall be pre-wet immediately prior to mixing with the emulsion. The mixing unit of the mixing chamber shall be capable of thoroughly blending all ingredients together. No violent mixing shall be permitted. An approved fines feeder that provides an accurate metering device or method to introduce a predetermined amount of mineral filler into the mixer at the same time and location that the aggregate is fed will be required. The mixing machine shall be equipped with a water pressure system and fog type spray bar, adequate for complete water fogging of the surface preceding the spreading equipment. The rate of application of the water shall be adjusted during the day to suit temperatures, surface texture, humidity, and dryness of the pavement surface to insure that the entire surface is damp with no apparent flowing water in front of the slurry box. Indicators shall be in conformance with the provisions of these special provisions and shall be in working order prior to commencing mixing and spreading operations.

Mixer-spreader trucks shall be equipped to proportion the polymer modified cationic asphalt

emulsion, water, aggregate, mineral filler, and set-control additives by volume. Rotating and reciprocating equipment on mixer-spreader trucks shall be covered with metal guards.

The mixer-spreader truck shall not be operated unless low-flow and no-flow devices and revolution counters are in good working condition and functioning and metal guards are in place. Indicators required by these special provisions shall be visible while walking alongside the mixer-spreader truck.

Aggregate feeders shall be connected directly to the drive on the emulsion pump. The drive shaft of the aggregate feeder shall be equipped with a revolution counter reading to the nearest one-tenth of a revolution.

Calibration: Each slurry mixing unit to be used in performance of the work shall be calibrated specifically for the contract prior to construction. Previous calibration documentation covering the exact materials to be used will not be accepted. The documentation shall include an individual calibration of each material at various setting, which shall be related to the machine metering device(s). No machine will be allowed to work on the project until the calibration has been completed and/or accepted.

Spreader Box: The polymer modified slurry seal mixture shall be spread by means of a spreader box conforming to the following requirements:

The spreader box shall be capable of placing the polymer modified slurry seal a minimum of 12 feet wide and shall have strips of flexible rubber belting or similar material on each side of the spreader box and in contact with the pavement to prevent the loss of polymer modified slurry seal from the box. Spreader box skids shall be maintained in such manner as to prevent chatter (wash boarding) in the finished mat. The spreader box in use shall be clean and free of polymer modified slurry seal and polymer modified cationic asphalt emulsion at the start of each work shift.

1. The spreader box shall have a series of strike-off devices at the rear of the box. The leading strike-off device shall be fabricated of steel, stiff rubber or other suitable material. The number of strike-off devices shall be determined by the Contractor. The first strike-off device shall be designed to maintain close contact with the pavement during the spreading operations, shall obtain the thickness required, and shall be capable of being adjusted to the various pavement cross sections for application of a uniform polymer modified slurry seal finished surface. The final strike-off device shall be fabricated of flexible material suitable for the intended use and shall be designed and operated to ensure a uniform texture is achieved in the finished surface of the polymer modified slurry seal. The final strike-off device shall be cleaned or changed daily if problems with longitudinal scouring occur.
2. Hand Work: Areas which cannot be reached with the slurry seal machine shall be surfaced using hand squeegees (36-inches wide) to provide complete and uniform slurry seal coverage and finish in the direction as

applied with a burlap mop. Contractor shall provide the necessary hand tools and any support equipment which is exclusive to the slurry seal operation

Preparation for Polymer Modified Slurry Sealing:

Before placing the polymer modified slurry seal, The Contractor shall be responsible for clearing the street of any obstruction (low hanging tree limbs, trash piles, etc.) interfering with the completion of the contract. The pavement surface shall be cleaned by sweeping with PM-10 efficient type self-propelled pick up sweeper, flushing or by other means necessary to remove loose particles of paving, dirt, vegetation and other objectionable material.

All areas will be swept to the satisfaction of the inspector.

A paint binder (tack coat) of asphaltic emulsion shall be applied to all Portland cement concrete surfaces when there is a contract item for the work or when the work is required in these special provisions. The asphaltic emulsion for paint binder (tack coat) shall be grade SS1, SS1h, CSS1 or CSS1h and shall conform to the provisions of AASHTO M-140 or AASHTO M 208 "Emulsified Asphalts". The asphaltic emulsion shall be mixed in the proportion of one part of emulsion (which contains up to 43 percent water) to 3 parts water. The mixture shall be applied at the approximate rate of 0.04 -0.08 g/sqyd. When asphaltic emulsion is used as a paint binder (tack coat), polymer modified slurry seal shall not be placed until the asphaltic emulsion has cured.

Placing:

The polymer modified slurry seal mixture shall be uniformly spread on the existing surfacing within the rate specified without spotting, re-handling or otherwise shifting of the mixture.

1. The polymer modified slurry seal mixture shall not be placed when the ambient temperature is below 50 °F or during unsuitable weather. Polymer modified slurry seal shall not be placed if rain IS imminent or if there is the possibility that there will be freezing temperatures within 24 hours.
2. Polymer modified slurry seal shall be spread at a rate within the following ranges of pound of dry aggregate per square yard.

Aggregate Type	Location	Spread Rate (lbs/yd ²)
Type II	Full Traffic Width	18 Minimum

Longitudinal joints shall correspond with the edges of the traffic lanes. The Engineer may permit other patterns of longitudinal joints if the patterns will not adversely affect the quality of the finished product.

3. Through traffic lanes shall be spread in full lane widths only. Longitudinal joints common to 2 traffic lanes shall be butt joints with overlaps not to exceed 3

inches. Building paper shall be placed at the transverse joints to avoid double placement of the polymer modified slurry seal. Other suitable methods to avoid double placement of the polymer modified slurry seal will be allowed. No excessive buildup, uncovered areas, or unsightly appearance shall be determined on longitudinal or transverse joints. Hand tools shall be available to remove spillage.

4. The mixture shall be uniform and homogeneous after placing on the surfacing and shall not show separation of the polymer modified cationic asphalt emulsion and aggregate after setting. The completed surface shall be of uniform texture and free from ruts, humps, depressions, or irregularities. No streaks, such as those caused by oversize aggregate, will be left in the finished surface. If excess oversized aggregate develops, the job will be stopped until the contractor can prove the situation has been corrected. Adequate means shall be provided to protect the polymer modified slurry seal from damage by traffic until such time that the mixture has cured sufficiently so that the polymer modified slurry seal will not adhere to or be picked up by the tires of vehicles.

Placement of the polymer modified slurry seal shall cease a minimum of one hour before the expiration of the road closure hours as specified in "Traffic Regulations" of the project special provisions, unless the Contractor proves to the satisfaction of the Engineer that the surface will be ready for unrestricted traffic at the expiration of the road closure hours.

Test Strip:

The Contractor shall construct a test strip at the discretion of the Engineer. If required, the test strip shall be 300 feet to 500 feet long and shall consist of the application courses specified. The test strip shall be constructed at either at night time or early morning and shall cure and be open to traffic within 75 minutes of application.

The Engineer will evaluate the completed test strip after 12 hours of traffic on the completed test strip to determine if the mix design and placement procedure are acceptable. If the mix design or the placement procedure is determined by the Engineer to be unacceptable, the test strip will be rejected, the Contractor shall make modifications, and a new test strip shall be constructed and evaluated by the Engineer. The cost of materials and placement of the test strips, which have been rejected, shall be borne by the Contractor and will not be considered as part of the contract work. If ordered by the Engineer, rejected test strips shall be removed at the Contractors expense.

Procedure:

The contractor shall perform the service in a safe, acceptable, workman like manner. Personnel shall be experienced, knowledgeable and capable in all aspects of performing the service. The same key personnel that start the project shall remain on the project for the life of the project.

1. The equipment shall be in good repair and serviceable to operate in a reliable and safe manner.
2. The contractor shall place polymer modified slurry seal to the beginning and ending limits of the work as directed by the Engineer.
3. The contractor shall be responsible for providing the street cleaning, "No Parking" posting, and traffic control. Contractor shall place signs as directed by the Engineer to notify residents of any scheduled street closures. Signs shall be constructed per plans.
4. The Contractor shall notify all emergency services residents, apartment managers, post offices, schools and businesses by handbill 48 hours in advance of any street restriction that will affect access to their property. The Contractor shall present the handbill to the Public Works Operations Manager or designee for approval, prior to its distribution to the public. The handbill will include the month (*non-numeric*) and dates expected for the restrictions. For Monday work, the handbill shall be distributed the preceding Thursday. For Tuesday work, the handbill shall be distributed the preceding Friday. Should work not occur or be completed on the specified day, a new handbill will be distributed by the Contractor. The cost shall be incidental to the project. Re-notification shall be a minimum of 24 hours in advance. For rain days, the Contractor may "pre-notify" the public of potential non-work in lieu of re-notification.
5. Contractor shall sand intersections as directed by the Engineer to allow traffic to cross freshly placed polymer modified slurry seal at intersections, business entrances/ex its and other locations that cannot, in the estimation of the Engineer, be completely closed to traffic. Sand material will be the same aggregate used in the polymer modified slurry seal mixture.
6. The Contractor shall be responsible for all clean up of the work areas and staging areas. The Contractor shall be responsible for covering and uncovering all structure covers, such as man holes, valves, monument covers and all structures as necessary. All street (full width and gutters) shall be swept by PM-IO efficient type self-propelled pick up sweeper no sooner than 24hrs after polymer modified slurry seal placement is complete and re-swept as necessary.

7. At the end of each day's and each week's production, the contractor will provide to the Inspector a report containing the following information:
 - a. Tons of dry aggregate consumed that day/week
 - b. Tons of emulsion consumed that day/week; and
 - c. Square yardage covered that day/week.

This report shall be received no later than 10:00 a.m. of the following day for daily reports and by 10:00 a.m. the following Monday for weekly reports.

Area Omissions:

All areas temporarily omitted by the Contractor during normal operations shall be logged and a list of the missed areas (addresses or intersections) given the inspector before the start of the next day's work.

Clean Up:

All areas, such as sidewalks, gutters, and intersections, shall have slurry seal removed as specified by the City. The Contractor shall sweep, with PM-10 efficient type self-propelled pick up sweeper, all areas surfaced not less than 24 hours after application. All areas will be swept to the satisfaction of the inspector.

Repair of Early Distress:

If bleeding, raveling, delamination, rutting, or wash boarding occurs within 60 days after placing the polymer modified slurry seal, the Contractor shall diligently pursue repairs by any method approved by the Engineer. The Contractor shall not be relieved from maintenance until repairs have been completed.

Patching: Areas that require patching shall be full lane width or as directed by the inspector. Patching will be limited to one side of the street at a time.

Measurement:

Single Slurry, Type II shall be measured by the Square Yard. The quantity shall include the full pavement width area (lip or face of gutter to lip or face of gutter) on all streets identified to receive slurry seal.

Payment:

The accepted quantities of Slurry Seal Type II, measured as provided above, will be paid for at the contract unit price per square yard, which price shall be full compensation for the work, complete in place, with no allowance for waste, and shall include labor, equipment, tools, and incidentals to complete the work as prescribed and as directed by the Engineer.

The cost of testing for and furnishing mix design, cleaning the surface, furnishing added water and set-control additives, and protecting the polymer modified slurry seal (i.e. sanding) until it has set is considered incidental to this item of work.

No payment will be made for materials rejected due to improper placement, improper proportions of materials, or material found to be defective or out of specifications.

ITEM 6 OBLITERATE EXISTING PAVEMENT MARKINGS

General:

The work under this section consists of the contractor furnishing *all* labor, materials, tools, and equipment to obliterate existing pavement markings prior to slurry operations as shown on the project maps and required by these technical specifications.

Construction Requirements:

The contractor shall remove all existing pavement markings and striping in conflict with the final striping plan prior to commencing slurry operations, by ultra high pressure water (36,000 PSI). This removal method shall be done in conformance with EPA requirements. If the removal of striping causes a depression of 1/8 inch or greater in depth in the pavement surface, the contractor shall seal the area with slurry per MAG standard Specifications 713 and 715, Type II. Covering existing markings with black paint, tar or any other substance does not constitute line removal and will not be approved.

Measurement and Payment:

Obliterate existing pavement markings shall be measured per linear foot and paid at the linear foot price indicated on the Bid Schedule, which price shall be full compensation for the work as described herein and required to obliterate required pavement markings.

No payment in excess of 100% of the contract bid price shall be made, unless authorized by the Engineer as a result of extra work authorized in accordance with Section 109.4 of the MAG Uniform Standard Specifications. The bid item shall be considered to include any additional costs for sealing depressions greater than 1/8".

Contractor is encouraged to review existing site conditions of each roadway segment to determine exact obliteration required.

ITEM 7	WHITE STRIPE (PAINT) 4" EQUIVALENT
ITEM 8	YELLOW STRIPE (PAINT) 4" EQUIVALENT
ITEM 9	PAVEMENT MARKING ARROW (PAINT)
ITEM 10	PREFORMED PAVEMENT MARKING ARROW (90 MIL)
ITEM 11	PREFORMED PAVEMENT MARKINGS SPEED CUSHION (90 MIL)
ITEM 12	WHITE STRIPE (60 MIL THERMOPLASTIC) 4" EQUIVALENT
ITEM 13	WHITE STRIPE (90 MIL THERMOPLASTIC) 4" EQUIVALENT
ITEM 14	YELLOW STRIPE 60 MIL THERMOPLASTIC 4" EQUIVALENT
ITEM 15	RAISED PAVEMENT MARKER (TYPE D/G)
ITEM 16	RAISED PAVMENT MARKER (HYDRANT MAKER, TYPE DB, BLUE)

General:

The work under this section consists of the contractor furnishing all labor materials, tools, and equipment required to prepare the pavement surface and install the pavement markings shown on the project plans or disturbed by the project.

All pavement marking materials shall be approved by the City of Glendale Traffic Engineering Department prior to installation. The contractor shall contact the City of Glendale Traffic Engineering Department (phone number 623-930-2940) a minimum of 72 hours in advance of striping lay-out to obtain the necessary lane closure permits.

The contractor shall lay-out all striping and markings for the City of Glendale Traffic Engineering Department review and approval, a minimum of two (2) working days before installation.

All slurried roadways shall first be striped in water based paint and then re-striped with thermoplastic markings a minimum of 30 days after final paving. (See City of Glendale water based paint specifications for material type and installation).

Roadway striping shall not be done on weekends or holidays unless permission is granted in advance by the City Transportation Director, a minimum of two (2) working days before installation.

All pavement striping dimensions are to face of curb and center of stripe, or to the center of double stripes.

Construction Requirements:

Lane Lines and Centerline: Application of the white lane line and yellow centerline striping shall be performed in accordance with Arizona Department of Transportation (ADOT) Standard Specification 704. The application equipment shall be truck mounted per ADOT Standard Specification 704-3.01.

Materials for white lane line and yellow center line striping shall be in accordance with ADOT Standard Specification 704 with the exception that the material shall be Alkyd Thermoplastic. All long line striping shall be spray type and be applied at a thickness of 60 mils.

All yellow and white broken lane lines shall have a common start point and cycle length, so as to be restriped simultaneously, using a common cycle length on both sides of the truck carriage. The cycle length is to be 40 feet with a 10 foot long line and a 30 foot space between lines.

Crosswalks and Stop Bars: Installation for striping all stop bars and crosswalks shall be in accordance with Section 704 of the ADOT Standard Specifications, with the exception that the material shall be Alkyd Thermoplastic. The crosswalk and stop bars shall be the extruded type and applied at a thickness of 90 mils.

Pavement Turn Arrows and Symbols: Installation and material for left and right turn arrows shall be in accordance with Section 704 of the ADOT Standard Specifications. Turn arrow and symbol material to be thermoplastic and applied at a thickness of 90 mils. Speed cushion striping shall be in accordance with City of Glendale standard detail G-351.

Raised Pavement Markings: Raised pavement markers shall be in accordance with section 706 of the ADOT Standard Specifications. Material to be Stimsonite 911 raised pavement markers with un-tempered glass lens, or approved equal. Install the markers per City of Glendale details M1-5 and M1-6.

A double sided blue raised pavement marker shall be installed at each fire hydrant in accordance with City of Glendale Standard Detail G-650.

Measurement and Payment:

Painted / Preformed Pavement Marking Arrows shall be measured per each installed and paid at the contract unit cost per each indicated on the Bid Schedule, which price shall be full compensation for the work as described herein and required for installation.

White and Yellow Painted and 60 / 90 Mil Thermoplastic 4" Equivalent Stripe shall be measured per linear foot installed and paid at the contract unit cost per linear foot indicated on the Bid Schedule, which price shall be full compensation for the work as described herein and required for installation.

Raised Pavement Markers shall be measured per each installed and paid at the contract unit cost per each indicated on the Bid Schedule, which price shall be full compensation for the work as described and required for installation.

No payment in excess of 100% of the contract unit prices shall be made, unless authorized by the Engineer as a result of extra work authorized in accordance with Section 109.4 of the MAG Uniform Standard Specifications.

ITEM 17 TRAFFIC CONTROL

Description:

This item consists of a lump sum contingency allowance for the sole purpose of reimbursing Contractor for any traffic control required to complete construction activities.

Construction Requirements:

See "Traffic Regulations" of the project special provisions.

Measurement and Payment:

Traffic control shall be measured as a single complete item of work and paid at the lump sum price indicated on the Bid Schedule, which price shall be full compensation for the work as described herein and required to provide temporary traffic control.

Twenty five percent of the unit price bid will be paid in the following billing cycle upon conclusion of the pre-construction conference, substantial mobilization to the project and satisfactory initial installation of temporary traffic control devices. The remaining 75 percent will be paid in monthly increments based on the current month's percentage of project completion to include punch list items as calculated by the total payments made to the contractor divided by the total bid amount for the project.

No payment in excess of 100% of the contract lump sum price shall be made, unless authorized by the Engineer as a result of extra work authorized in accordance with Section 109.4 of the MAG Uniform Standard Specifications. The bid item shall be considered to include any additional costs for overtime hours for civilian or local enforcement flaggers, and drivers (Truck mounted Attenuation Device).

ITEM 18 UNIFORMED, OFF DUTY LAW ENFORCEMENT OFFICER CONTINGENCY

General:

See "Traffic Regulations" of the project special provisions.

Measurement and Payment:

See "Traffic Regulations" of the project special provisions.

ITEM 19 ALLOWANCE FOR CONCRETE MANHOLE RING REMOVE AND REPLACE

General:

This item includes a allowance for the sole purpose of reimbursing Contractor for removing and replacing concrete manhole rings as identified by City inspection staff during construction.

Construction Requirements:

No work for reimbursement under this Bid Item shall be initiated by Contractor until Contractor, Engineer and the City agree on rings to be removed and replaced.

Any portion of the stated sum not utilized remains the property of the City of Glendale.

All work shall be completed in accordance with MAG standard detail 422 and shall include, but is not limited to, all necessary materials, tools, layout, survey and labor required to complete each removal and replacement.

Measurement and Payment:

Measurement and payment for this item shall be made on a per each basis and as described above. Limit for this item is set at the price specified on the bid tab under ALLOWANCE FOR CONCRETE MANHOLE RING REMOVE AND REPLACE

No additional payment will be made for the removal and proper disposal of the existing concrete manhole rings, the cost considered included in this item.

ITEM 20 ALLOWANCE FOR CONCRETE VALVE RING REMOVE AND REPLACE

General:

This item includes a allowance for the sole purpose of reimbursing Contractor for removing and replacing concrete valve rings as identified by City inspection staff during construction.

Construction Requirements:

No work for reimbursement under this Bid Item shall be initiated by Contractor until Contractor, Engineer and the City agree on rings to be removed and replaced.

Any portion of the stated sum not utilized remains the property of the City of Glendale.

All work shall be completed in accordance with MAG standard detail 391 and shall include, but is not limited to, all necessary materials, tools, layout, survey and labor required to complete each removal and replacement.

Measurement and Payment:

Measurement and payment for this item shall be made on a per each basis and as described above. Limit for this item is set at the price specified on the bid tab under ALLOWANCE FOR CONCRETE VALVE RING REMOVE AND REPLACE

No additional payment will be made for the removal and proper disposal of the existing concrete valve rings, the cost considered included in this item.

ITEM 21 ALLOWANCE FOR CONCRETE SIDEWALK REMOVE AND REPLACE

General:

This item includes a allowance for the sole purpose of reimbursing Contractor for removing and replacing concrete sidewalk as identified by City inspection staff during construction.

Construction Requirements:

No work for reimbursement under this Bid Item shall be initiated by Contractor until Contractor, Engineer and the City agree on limits of sidewalk to be removed and replaced.

Any portion of the stated sum not utilized remains the property of the City of Glendale.

All work shall be completed in accordance with MAG standard detail 230 and shall include, but is not limited to, all necessary materials, tools, layout, survey and labor required to complete each removal and replacement.

Measurement and Payment:

Measurement and payment for this item shall be made on a per square foot basis and as described above. Limit for this item is set at the price specified on the bid tab under ALLOWANCE FOR CONCRETE SIDEWALK REMOVE AND REPLACE

No additional payment will be made for the removal and proper disposal of the existing concrete sidewalk, the cost considered included in this item.

ITEM 22 ALLOWANCE FOR CONCRETE CURB AND GUTTER REMOVE AND REPLACE

General:

This item includes a allowance for the sole purpose of reimbursing Contractor for removing and replacing concrete curb and gutter as identified by City inspection staff during construction.

Construction Requirements:

No work for reimbursement under this Bid Item shall be initiated by Contractor until Contractor, Engineer and the City agree on limits of curb and gutter to be removed and replaced.

Any portion of the stated sum not utilized remains the property of the City of Glendale.

All work shall be completed in accordance with MAG standard detail 220 and shall include, but is not limited to, all necessary materials, tools, layout, survey and labor required to complete each removal and replacement.

Measurement and Payment:

Measurement and payment for this item shall be made on a per linear foot basis and as described above. Limit for this item is set at the price specified on the bid tab under ALLOWANCE FOR CONCRETE CURB AND GUTTER REMOVE AND REPLACE

No additional payment will be made for the removal and proper disposal of the existing concrete curb and gutter, the cost considered included in this item.

ITEM 23 ALLOWANCE FOR CONCRETE VALLEY GUTTER REMOVE AND REPLACE

General:

This item includes a allowance for the sole purpose of reimbursing Contractor for removing and replacing concrete valley gutter as identified by City inspection staff during construction.

Construction Requirements:

No work for reimbursement under this Bid Item shall be initiated by Contractor until Contractor, Engineer and the City agree on limits of valley gutter to be removed and replaced.

Any portion of the stated sum not utilized remains the property of the City of Glendale.

All work shall be completed in accordance with MAG standard detail 240 and shall include, but is not limited to, all necessary materials, tools, layout, survey and labor required to complete each removal and replacement.

Measurement and Payment:

Measurement and payment for this item shall be made on a per square foot basis and as described above. Limit for this item is set at the price specified on the bid tab under ALLOWANCE FOR CONCRETE VALLEY GUTTER REMOVE AND REPLACE

No additional payment will be made for the removal and proper disposal of the existing concrete valley gutter, the cost considered included in this item.

ITEM 24 OWNERS ALLOWANCE FOR CONSTRUCTION CONTINGENCY

General:

This item includes a lump sum contingency allowance for the sole purpose of reimbursing Contractor for any unforeseen issues not apparent at the time of bidding the work to be performed.

Construction Requirements / Measurement and Payment:

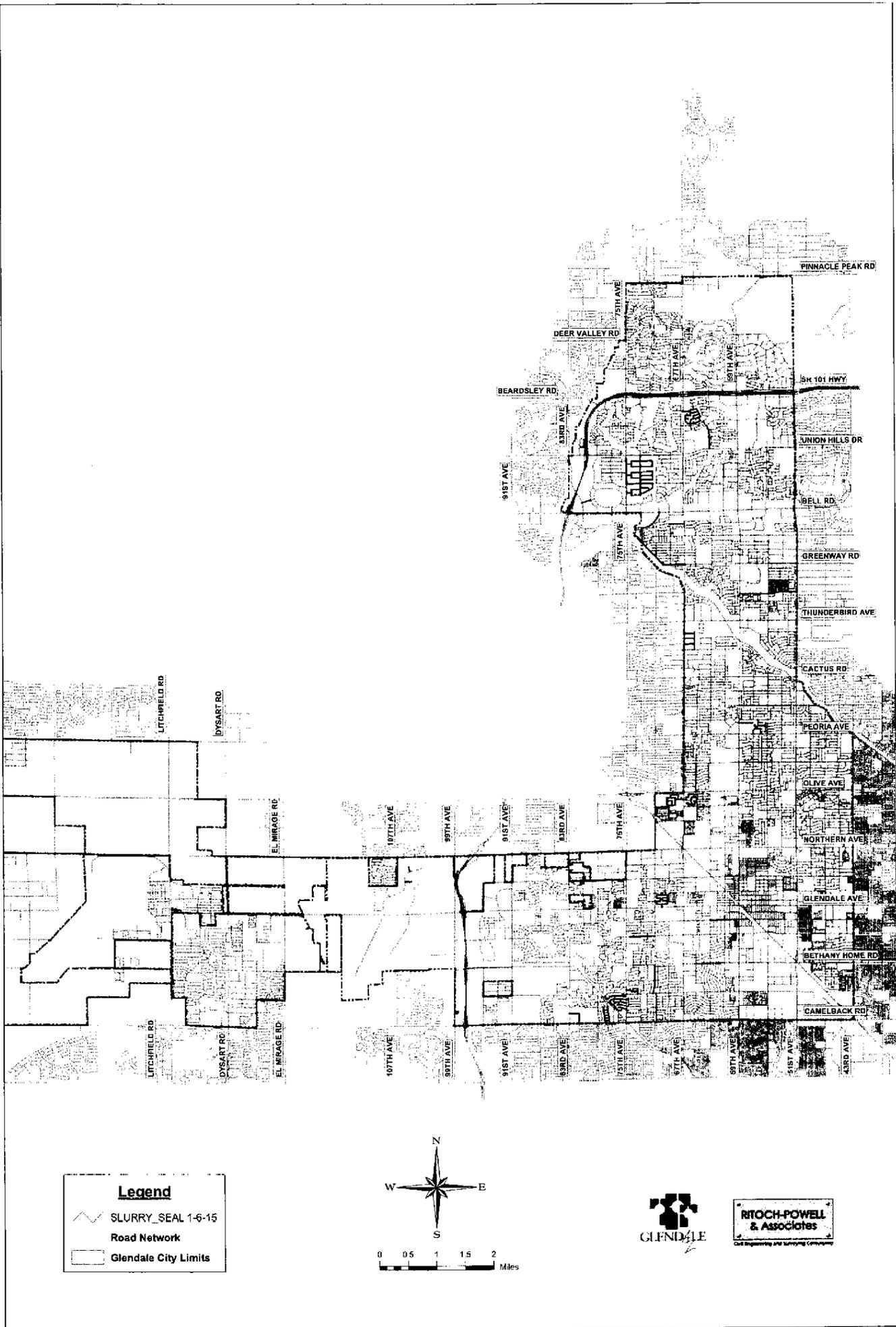
Measurement and payment for this item shall be made on individual basis per task and as described above. Limit for this item is set at the price specified on the bid tab under OWNERS ALLOWANCE FOR CONSTRUCTION CONTINGENCIES. See allowance for construction contingencies in the project special provisions for additional information.

END OF BID ITEMS

APPENDIX A

IMPROVEMENT OVERVIEW MAP

Surface Treatment Phase 1



APPENDIX B

IMPROVEMENT EXHIBITS

IMPROVEMENT EXHIBIT

EXHIBIT 1 of 63

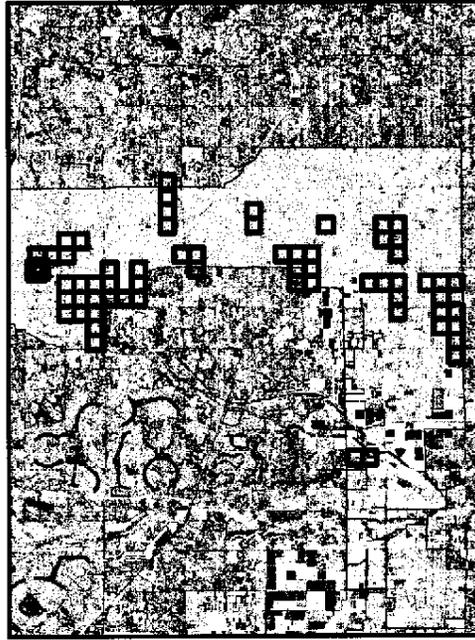


MATCH LINE TO EXHIBIT #2

Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- ▬ Crack_Seal_Areas

VICINITY MAP



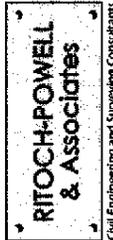
CONSTRUCTION NOTES:

- 1) ALL ASPHALT REPAIR AREA LOCATIONS SHOWN ARE APPROXIMATE. ACTUAL LOCATIONS ARE AS MARKED IN THE FIELD.
- 2) ALL STREETS IDENTIFIED TO RECEIVE SLURRY SEAL SHALL HAVE A TYPE II SLURRY APPLIED.
- 3) SPECIFIC LOCATION INFORMATION AND IMPROVEMENT QUANTITIES CAN BE FOUND IN THE APPLICABLE IMPROVEMENT INDEX.

Prepared For:



Prepared By:



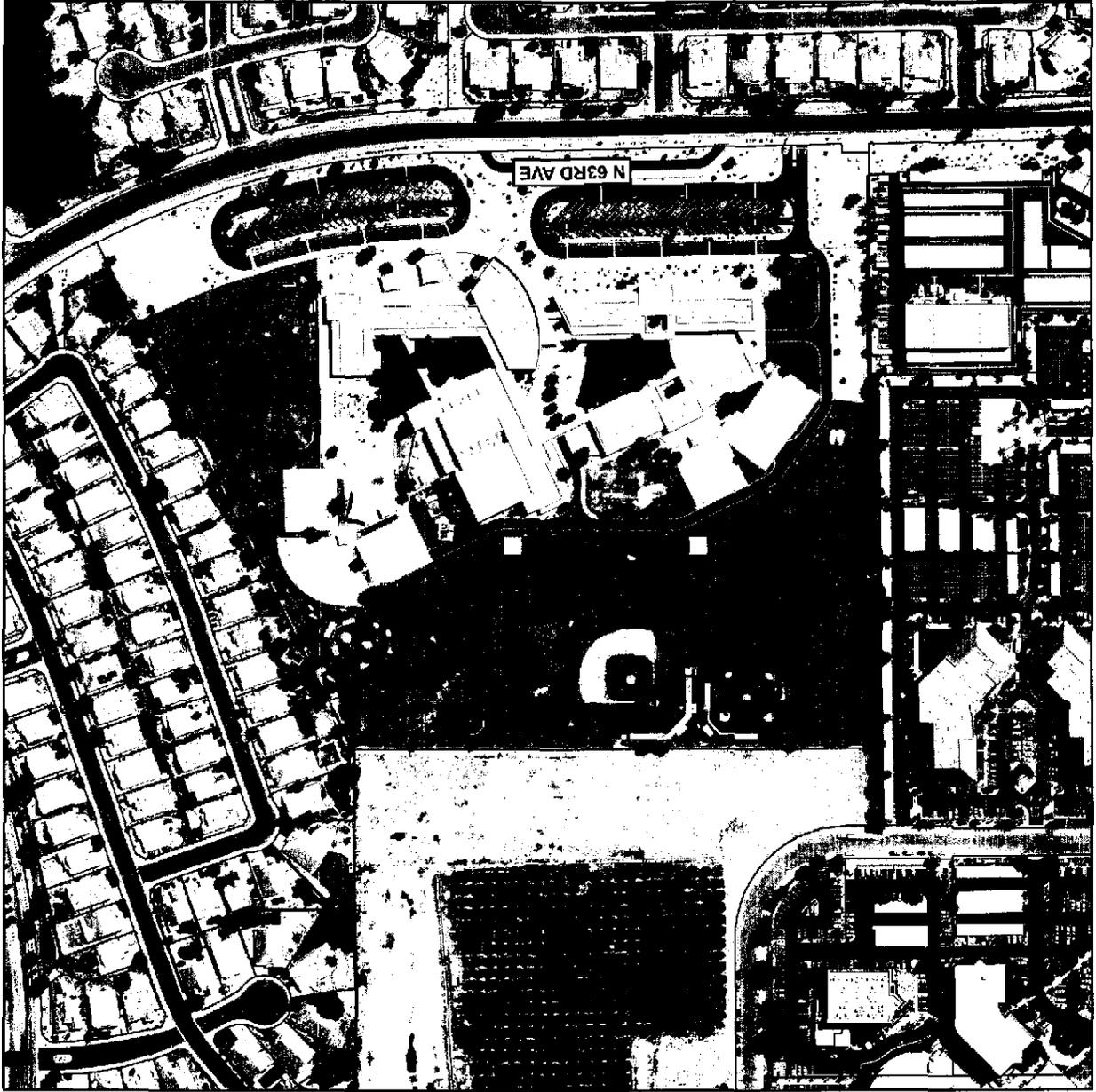
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IMPROVEMENT EXHIBIT

EXHIBIT 3 of 63

MATCH LINE TO EXHIBIT #2



MATCH LINE TO EXHIBIT #7

Feet



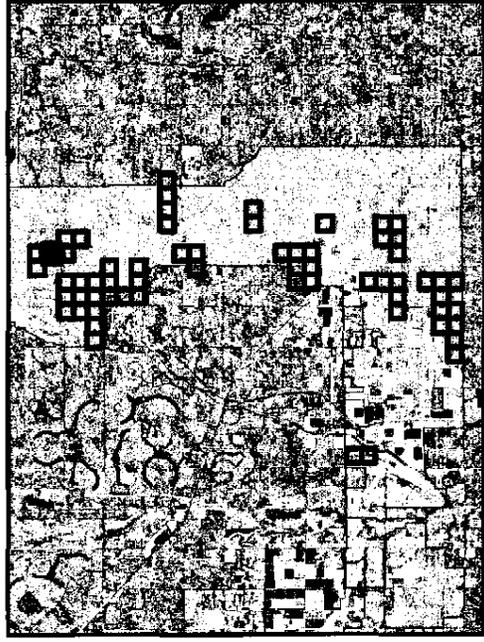
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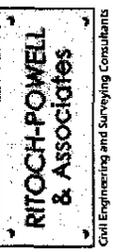
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Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- Crack_Seal_Areas

VICINITY MAP



Prepared For:  GLENDALE
Prepared By:  RITOCH-POWELL & Associates
Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

EXHIBIT 4 of 63



MATCH LINE TO EXHIBIT #5

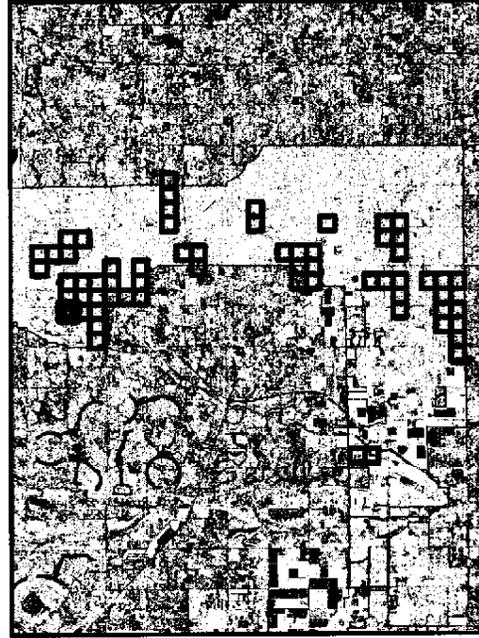
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Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- Crack_Seal_Areas

VICINITY MAP



Prepared For:



Prepared By:

RITICH-POWELL & Associates

Civil Engineering and Surveying Consultants



IMPROVEMENT EXHIBIT

EXHIBIT 5 of 63

NORTH



MATCH LINE TO EXHIBIT #4

MATCH LINE TO EXHIBIT #6

MATCH LINE TO EXHIBIT #10

Feet



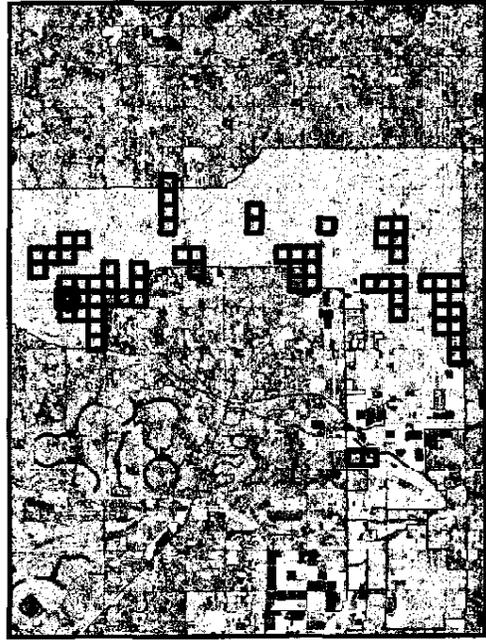
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Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- Crack_Seal_Areas

VICINITY MAP



Prepared For:

Prepared By:



RITZCH-POWELL & Associates
Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

EXHIBIT 6 of 63



MATCH LINE TO EXHIBIT #5

MATCH LINE TO EXHIBIT #11

Feet



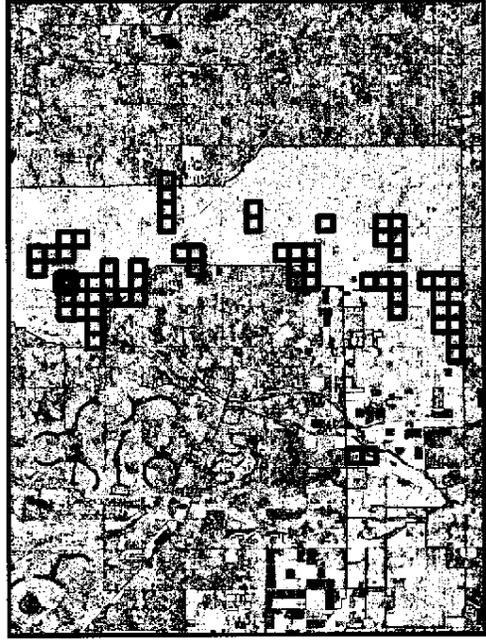
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Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- Crack_Seal_Areas

VICINITY MAP



Prepared For:



Prepared By:

RITICH-POWELL & Associates

Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

EXHIBIT 7 of 63

MATCH LINE TO EXHIBIT #3



MATCH LINE TO EXHIBIT #8

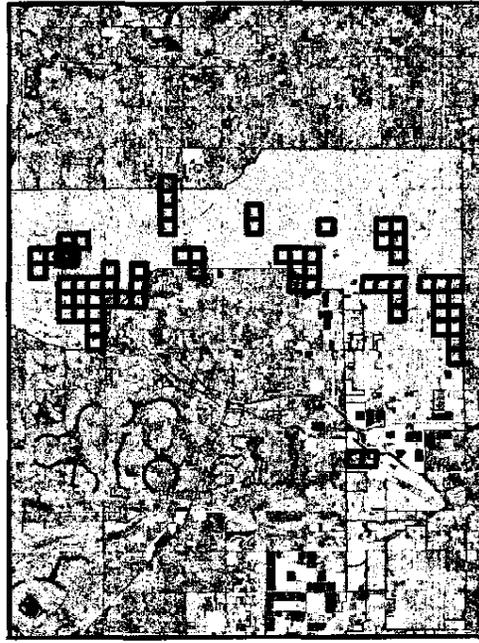
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Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- Crack_Seal_Areas

VICINITY MAP



Prepared For:



Prepared By:

RITICH-POWELL & Associates

Civil Engineering and Surveying Consultants



IMPROVEMENT EXHIBIT

EXHIBIT 8 of 63



MATCH LINE TO EXHIBIT #12

Feet



720

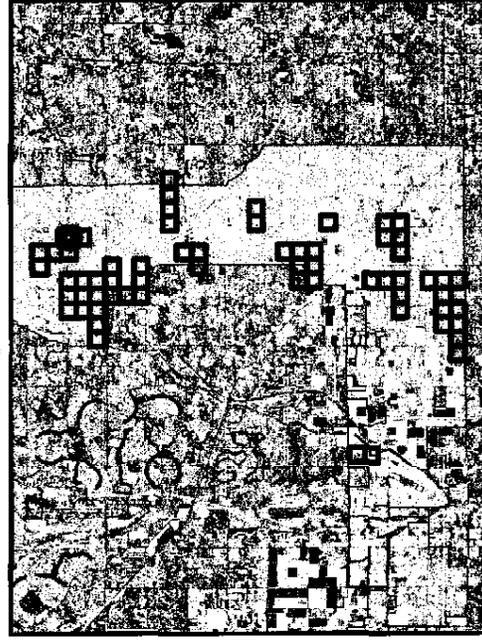
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Legend

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- Slurry_Seal_Areas
- Crack_Seal_Areas

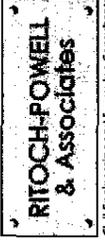
VICINITY MAP



Prepared For:



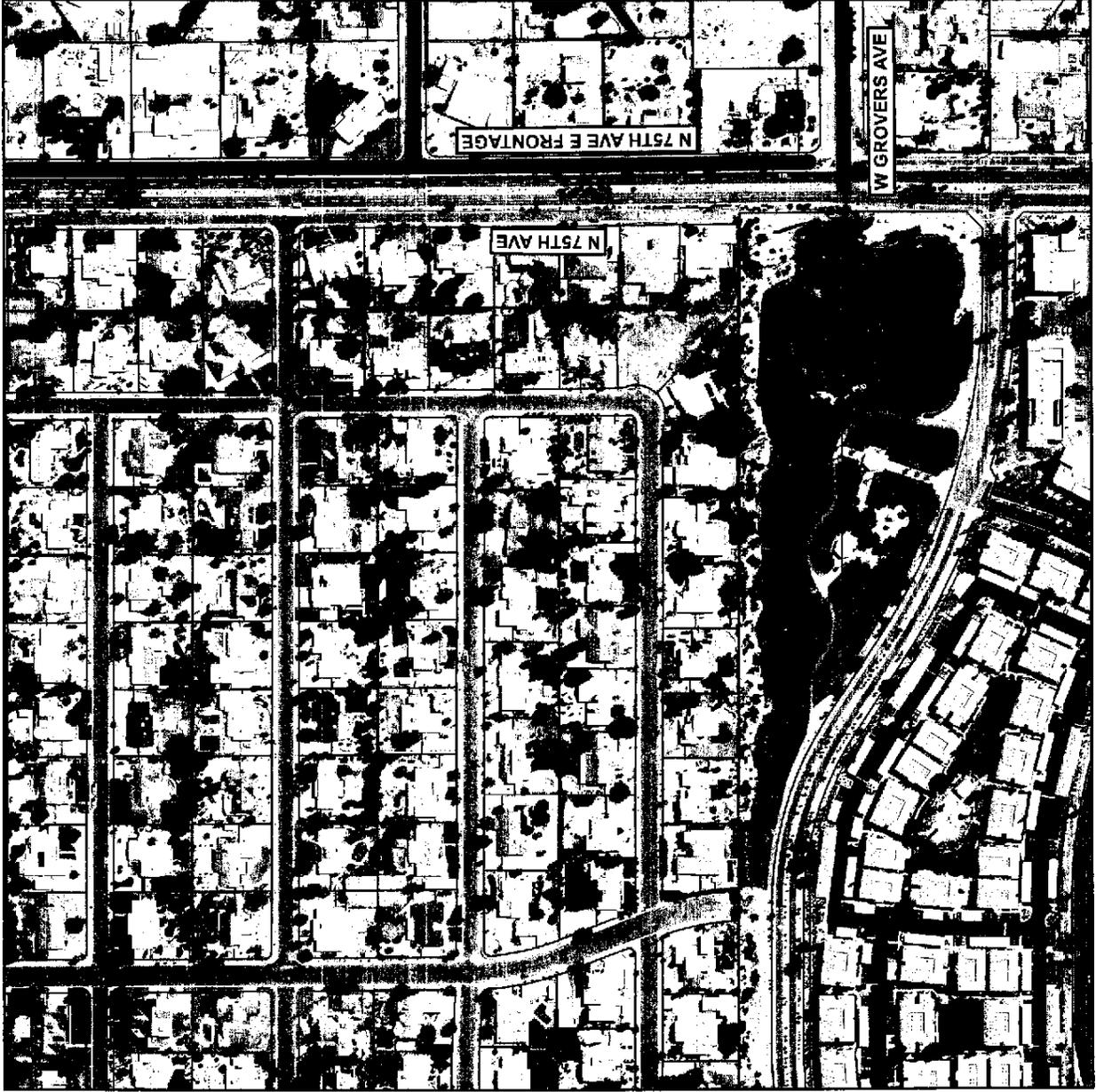
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IMPROVEMENT EXHIBIT

EXHIBIT 9 of 63

MATCH LINE TO EXHIBIT #4



MATCH LINE TO EXHIBIT #10

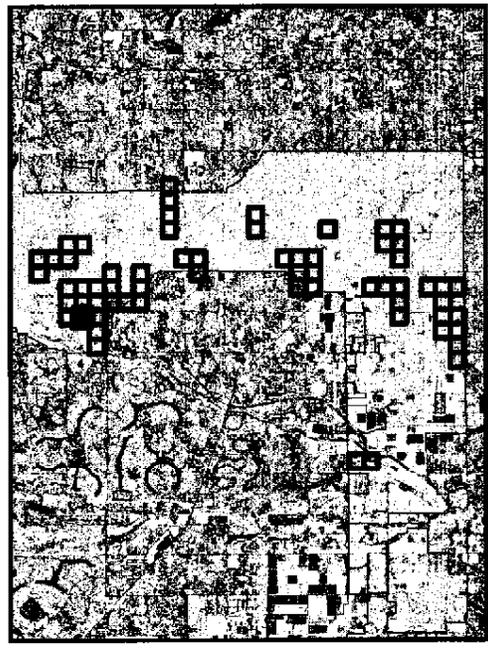
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Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- Crack_Seal_Areas

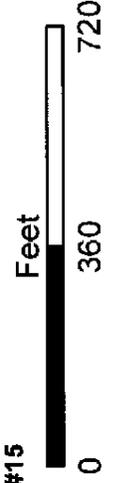
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Prepared For:



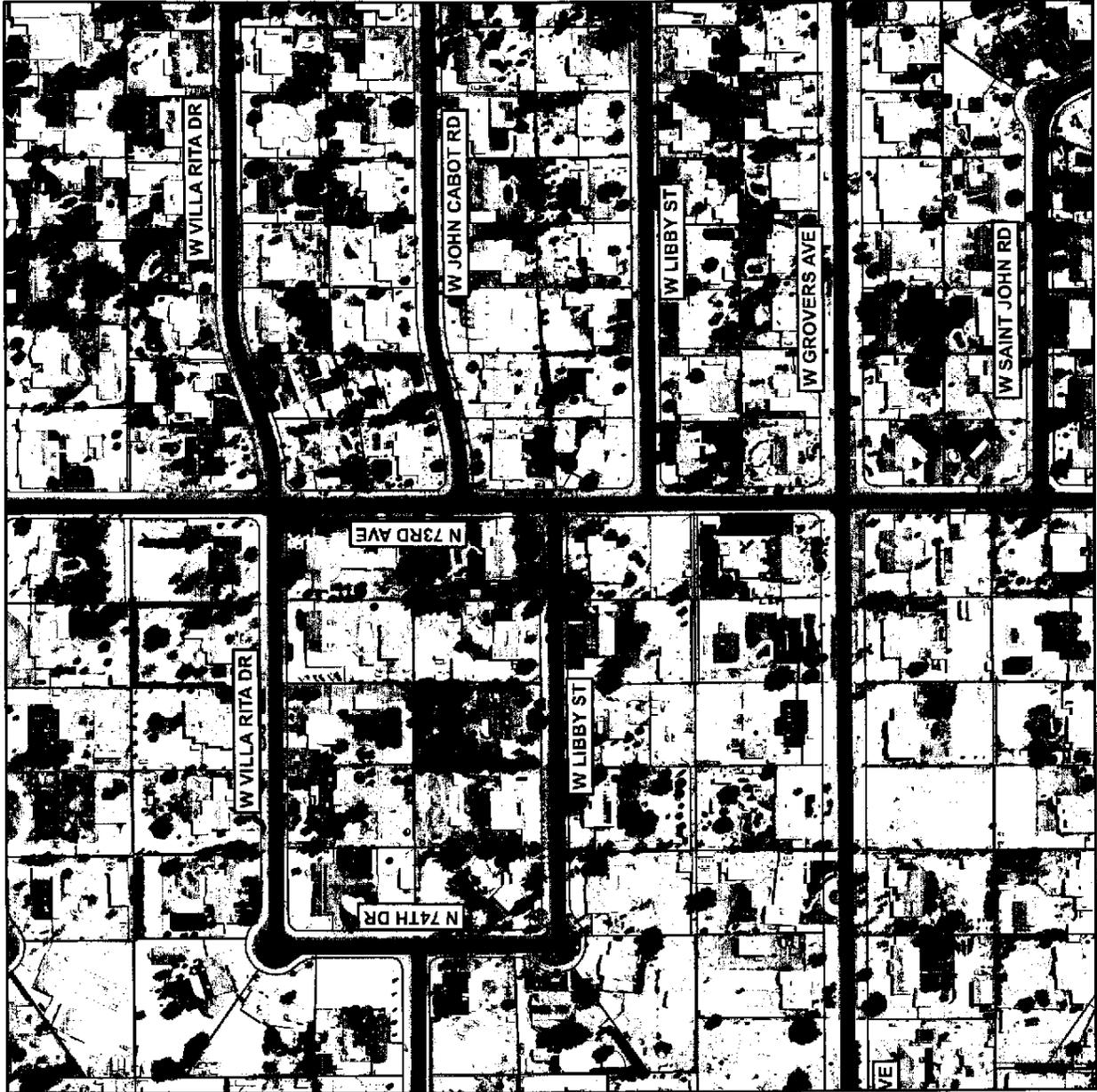
Prepared By:



IMPROVEMENT EXHIBIT

EXHIBIT 10 of 63

MATCH LINE TO EXHIBIT #5



MATCH LINE TO EXHIBIT #16

Feet



CONSTRUCTION NOTES:

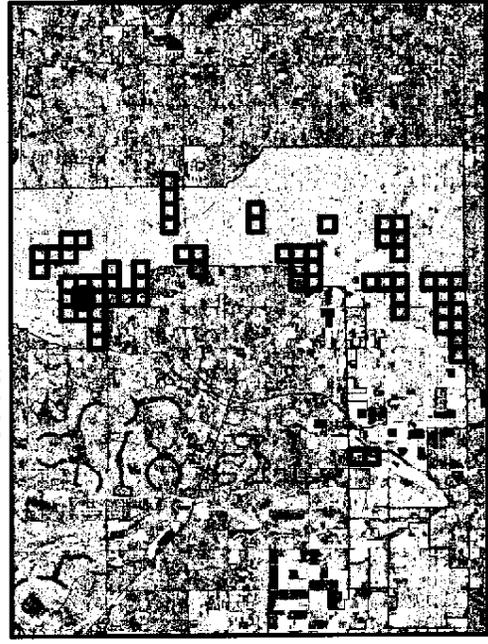
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MATCH LINE TO EXHIBIT #11

Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- Crack_Seal_Areas

VICINITY MAP



Prepared For:



Prepared By:

RITTOCH-POWELL
& Associates

Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

EXHIBIT 11 of 63

MATCH LINE TO EXHIBIT #6



MATCH LINE TO EXHIBIT #10

MATCH LINE TO EXHIBIT #17

Feet



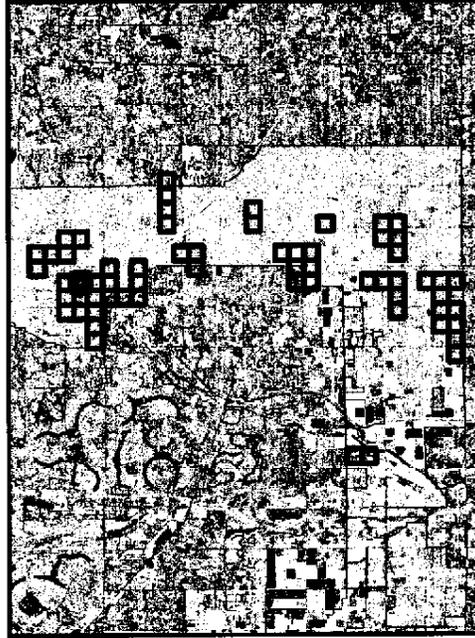
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Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- Crack_Seal_Areas

VICINITY MAP



Prepared For:



Prepared By:

RITCOCH-POWELL & Associates

Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

EXHIBIT 12 of 63

MATCH LINE TO EXHIBIT #8



Feet



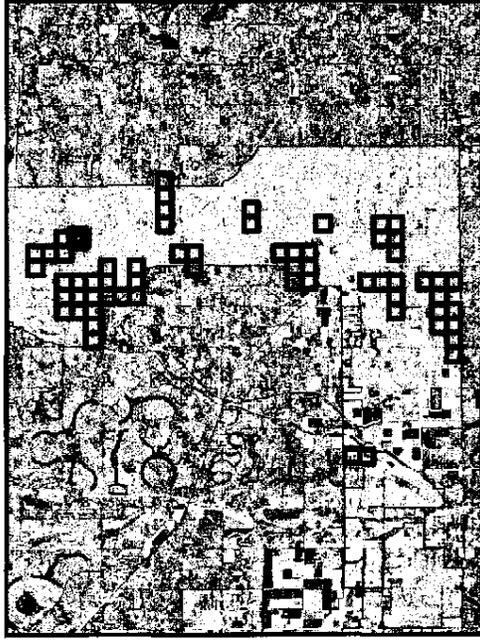
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Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- Crack_Seal_Areas

VICINITY MAP



Prepared For:



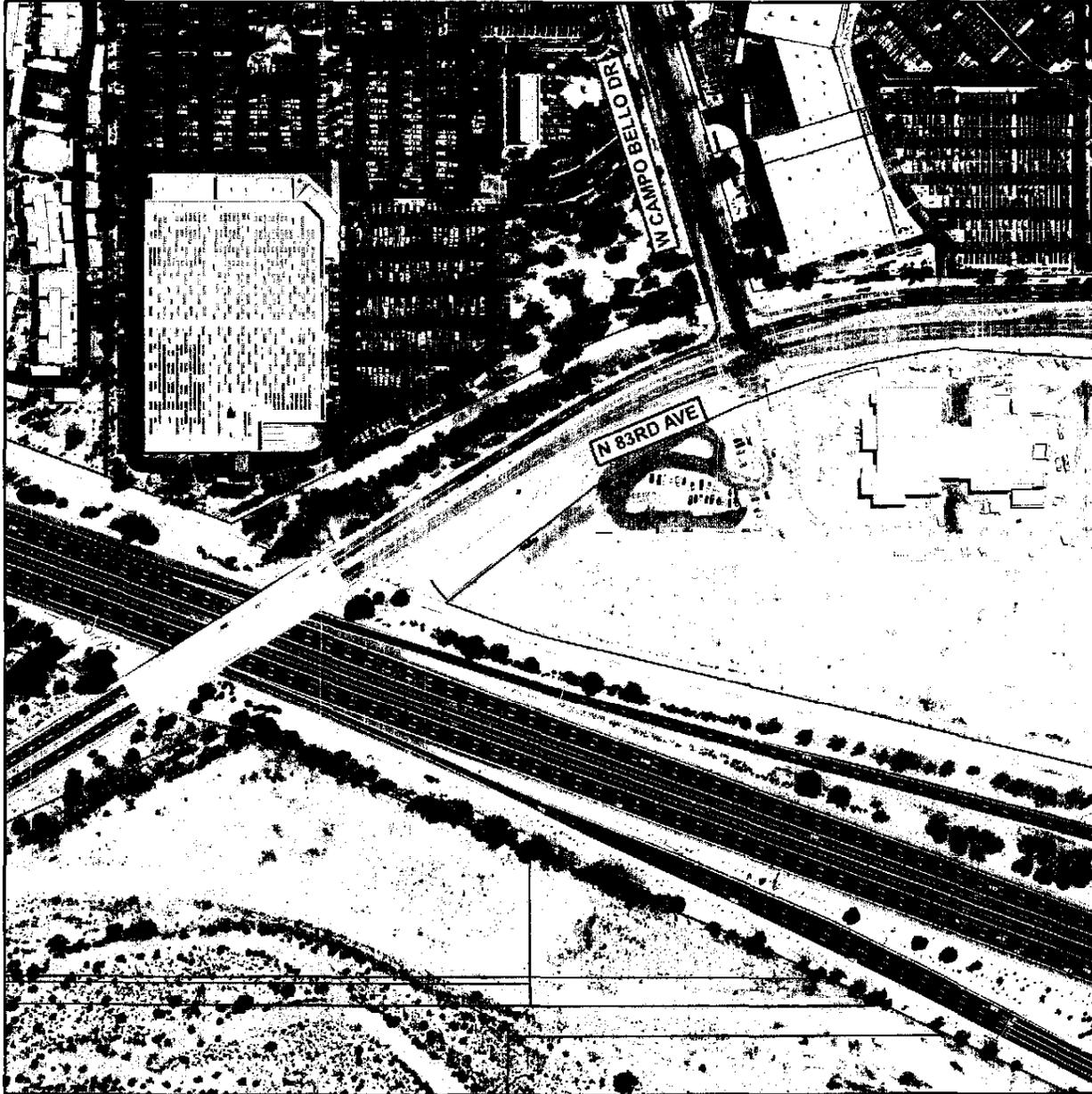
Prepared By:

RITICH-POWELL & Associates

Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

EXHIBIT 13 of 63



MATCH LINE TO EXHIBIT #14

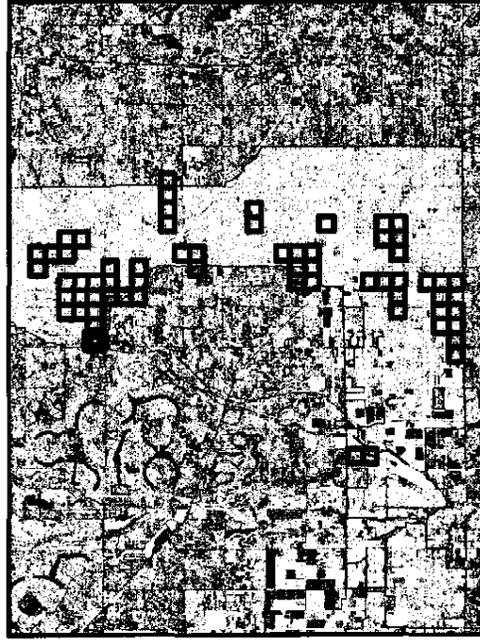
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Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- Crack_Seal_Areas

VICINITY MAP



Prepared For:



Prepared By:

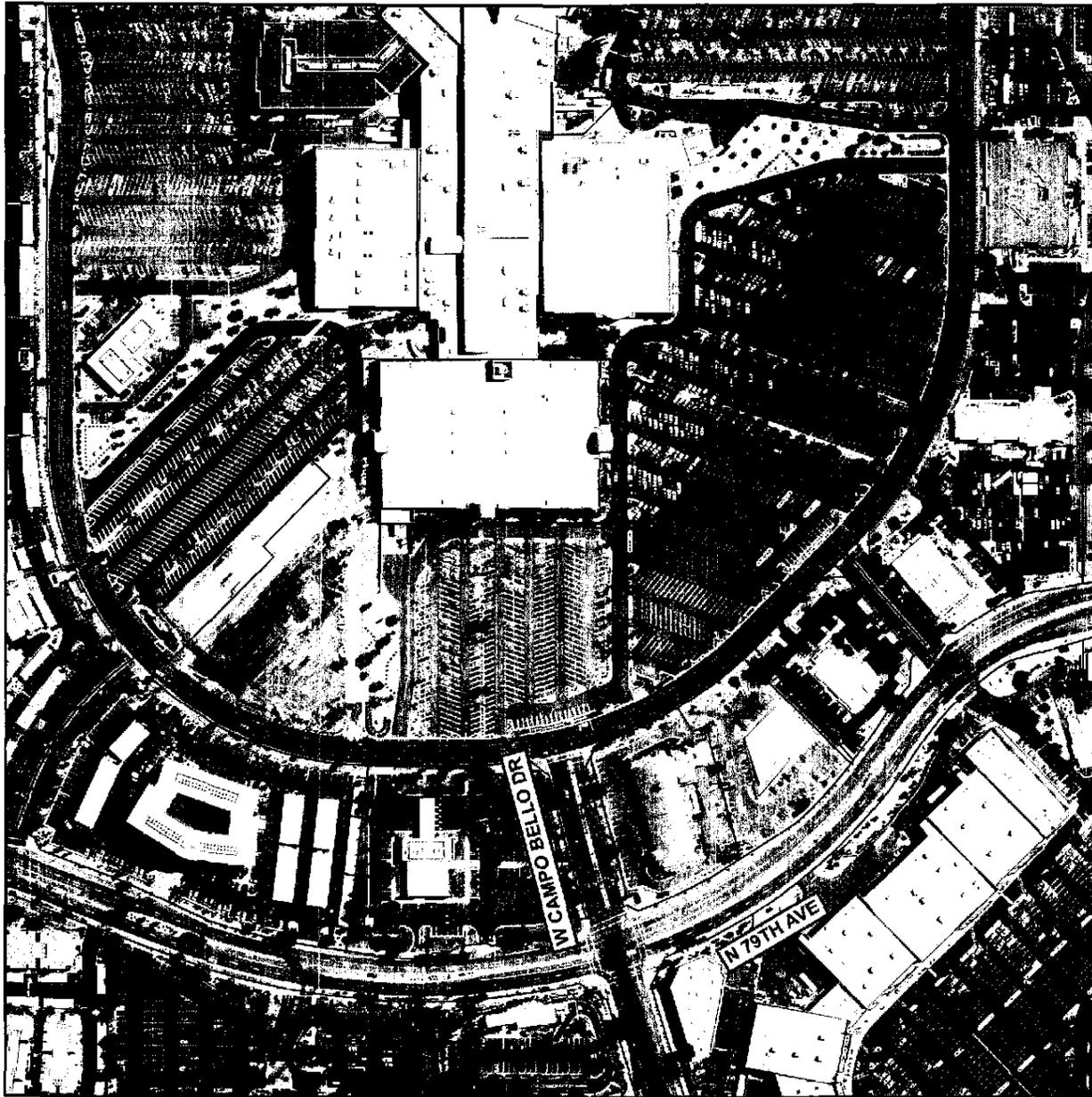
RITICH-POWERELL & Associates

Civil Engineering and Surveying Consultants



IMPROVEMENT EXHIBIT

EXHIBIT 14 of 63



MATCH LINE TO EXHIBIT #13

MATCH LINE TO EXHIBIT #15

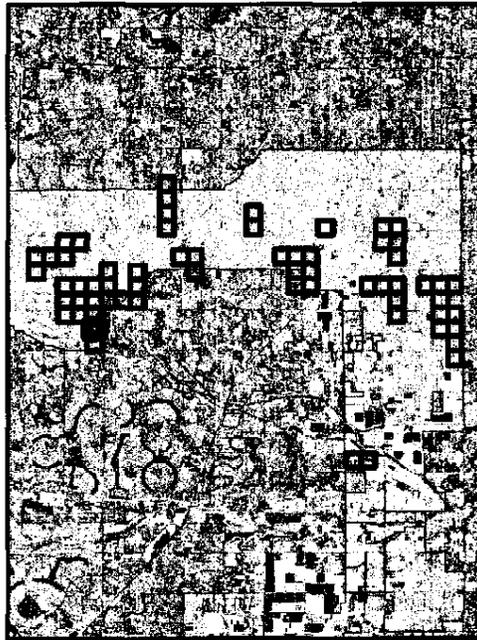
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Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- ▬ Crack_Seal_Areas

VICINITY MAP



Prepared For:



Prepared By:

RITICH-POWELL
& Associates

Civil Engineering and Surveying Consultants

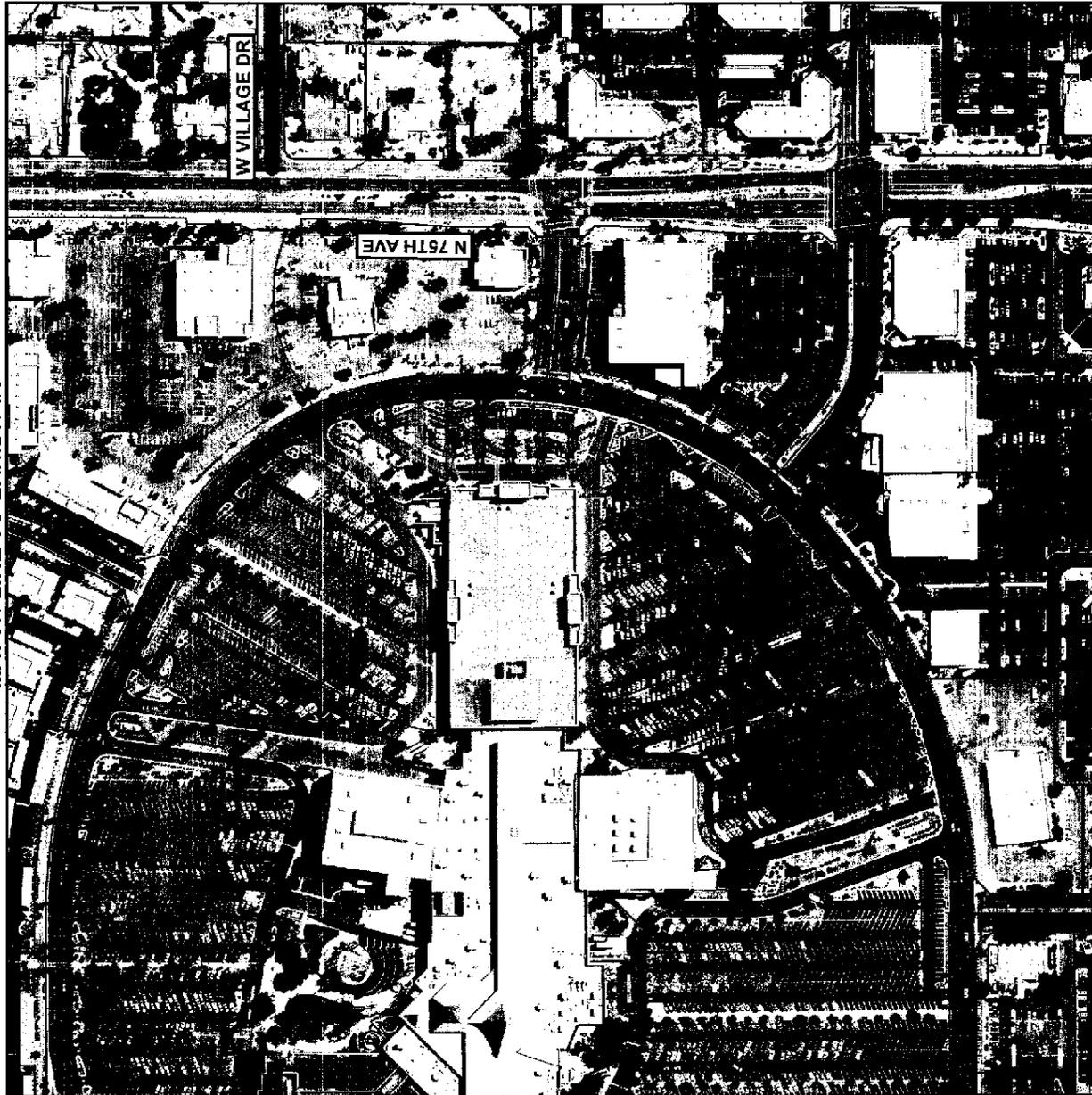
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IMPROVEMENT EXHIBIT

EXHIBIT 15 of 63

MATCH LINE TO EXHIBIT #9



MATCH LINE TO EXHIBIT #14

MATCH LINE TO EXHIBIT #16

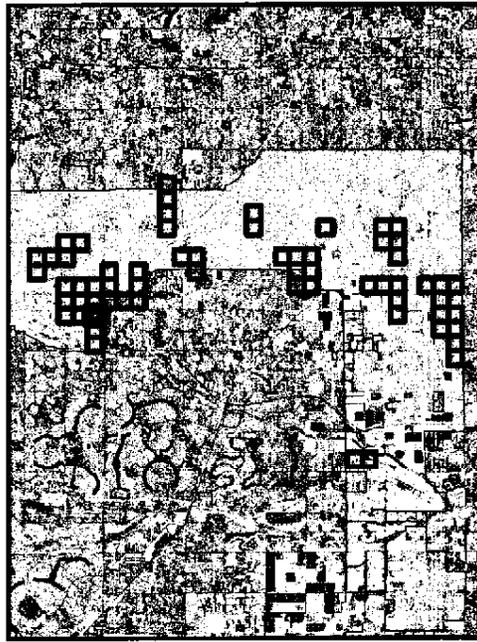
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Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- Crack_Seal_Areas

VICINITY MAP



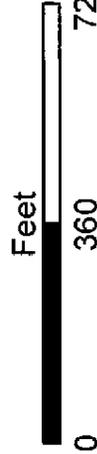
Prepared For:



Prepared By:

RITICH-POWELL
& Associates

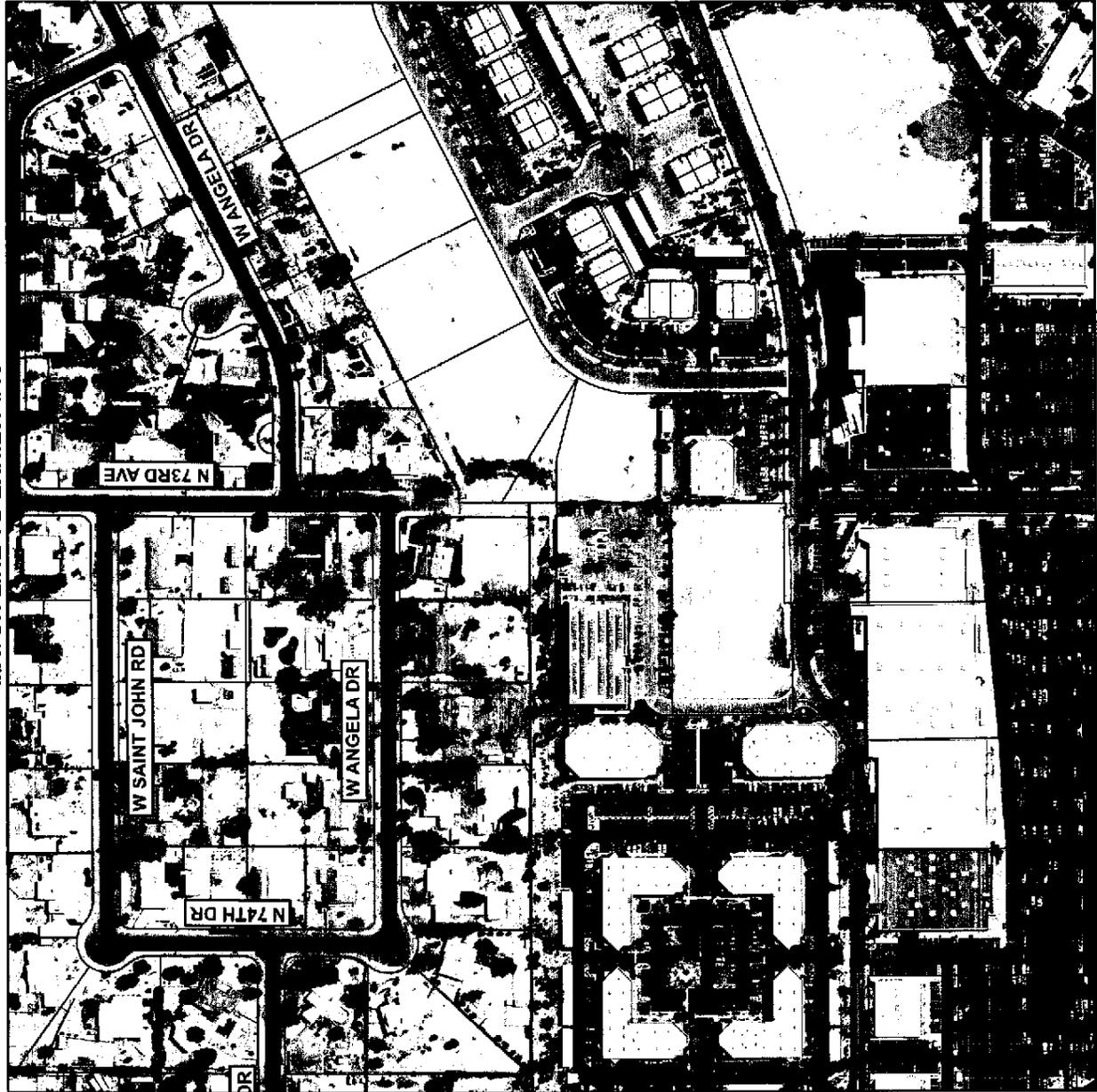
Civil Engineering and Surveying Consultants



IMPROVEMENT EXHIBIT

EXHIBIT 16 of 63

MATCH LINE TO EXHIBIT #10



CONSTRUCTION NOTES:

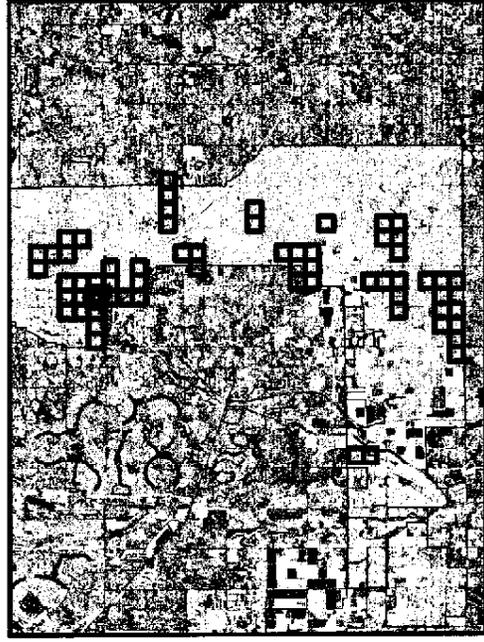
- 1) ALL ASPHALT REPAIR AREA LOCATIONS SHOWN ARE APPROXIMATE. ACTUAL LOCATIONS ARE AS MARKED IN THE FIELD.
- 2) ALL STREETS IDENTIFIED TO RECEIVE SLURRY SEAL SHALL HAVE A TYPE II SLURRY APPLIED.
- 3) SPECIFIC LOCATION INFORMATION AND IMPROVEMENT QUANTITIES CAN BE FOUND IN THE APPLICABLE IMPROVEMENT INDEX.

MATCH LINE TO EXHIBIT #17

Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- ▬ Crack_Seal_Areas

VICINITY MAP



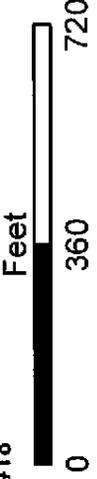
Prepared For:

Prepared By:



RITICH-POWELL & Associates
Civil Engineering and Surveying Consultants

MATCH LINE TO EXHIBIT #18



IMPROVEMENT EXHIBIT

EXHIBIT 17 of 63

MATCH LINE TO EXHIBIT #11



MATCH LINE TO EXHIBIT #16

MATCH LINE TO EXHIBIT #19

Feet



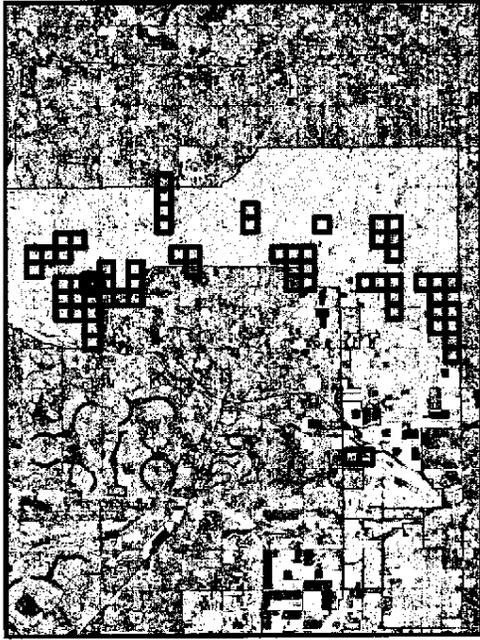
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Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- Crack_Seal_Areas

VICINITY MAP



Prepared For:  GLENDALE

Prepared By:

RITICH-POWELL & Associates
Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

EXHIBIT 18 of 63

MATCH LINE TO EXHIBIT #16



MATCH LINE TO EXHIBIT #19

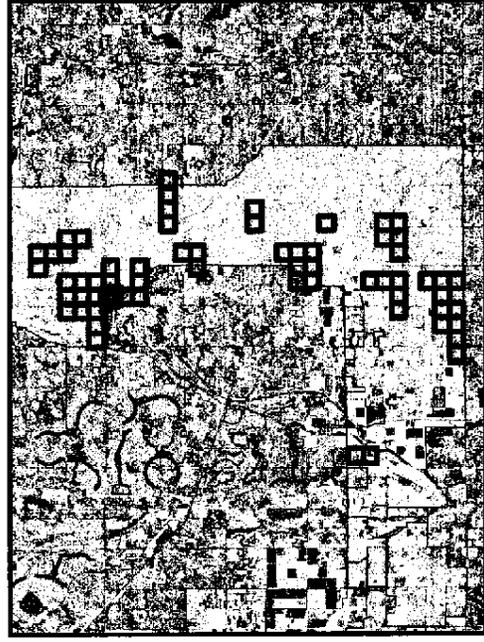
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Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- Crack_Seal_Areas

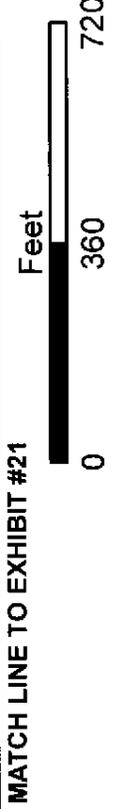
VICINITY MAP



Prepared For:  GLENDALE

Prepared By:

RITICH-POWELL & Associates
Civil Engineering and Surveying Consultants



IMPROVEMENT EXHIBIT

EXHIBIT 19 of 63

MATCH LINE TO EXHIBIT #17



MATCH LINE TO EXHIBIT #18

MATCH LINE TO EXHIBIT #20

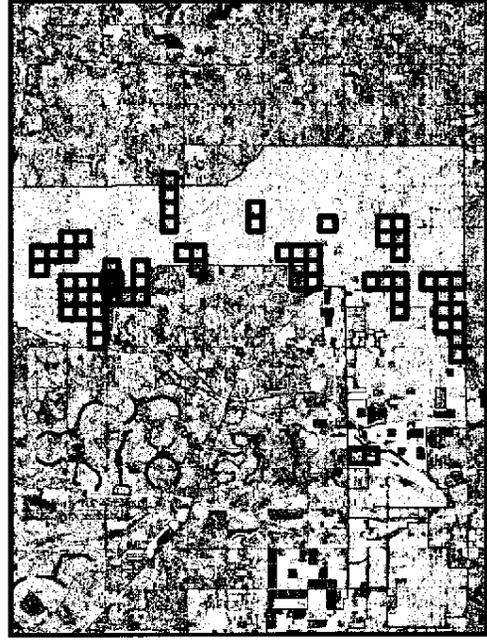
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Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- Crack_Seal_Areas

VICINITY MAP



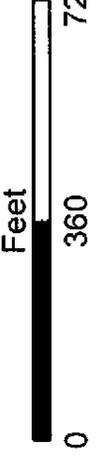
Prepared For:



Prepared By:

RITICH-POWERELL & Associates

Civil Engineering and Surveying Consultants



IMPROVEMENT EXHIBIT

EXHIBIT 20 of 63



MATCH LINE TO EXHIBIT #19

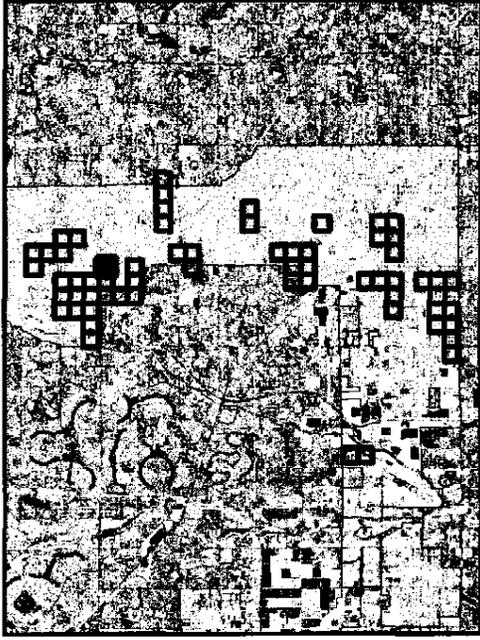
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Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- Crack_Seal_Areas

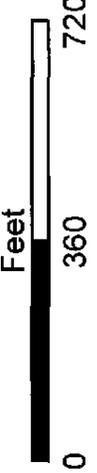
VICINITY MAP



Prepared For:



Prepared By:



IMPROVEMENT EXHIBIT

EXHIBIT 21 of 63

MATCH LINE TO EXHIBIT #18



MATCH LINE TO EXHIBIT #22

Feet



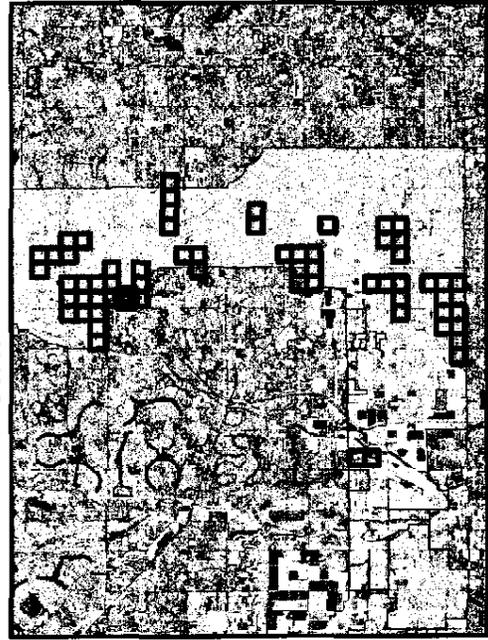
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Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- Crack_Seal_Areas

VICINITY MAP



Prepared For:



Prepared By:

RITICH-POWELL & Associates
Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

EXHIBIT 22 of 63

MATCH LINE TO EXHIBIT #21

NORTH



MATCH LINE TO EXHIBIT #23

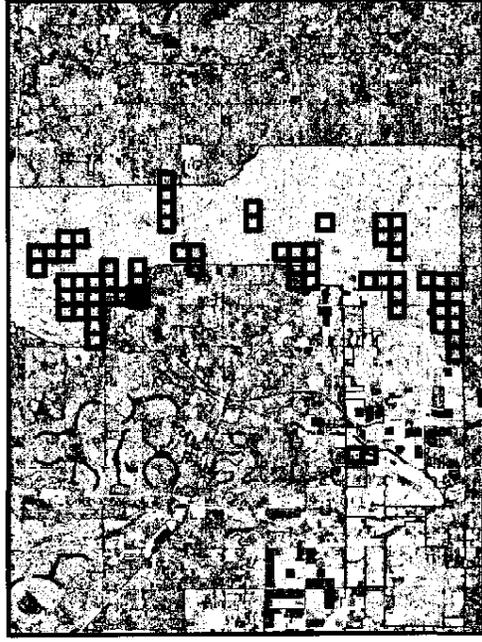
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Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- Crack_Seal_Areas

VICINITY MAP



Prepared For:



Prepared By:

RITICH-POWELL
& Associates

Civil Engineering and Surveying Consultants

Feet



IMPROVEMENT EXHIBIT

EXHIBIT 23 of 63



MATCH LINE TO EXHIBIT #22

MATCH LINE TO EXHIBIT #24

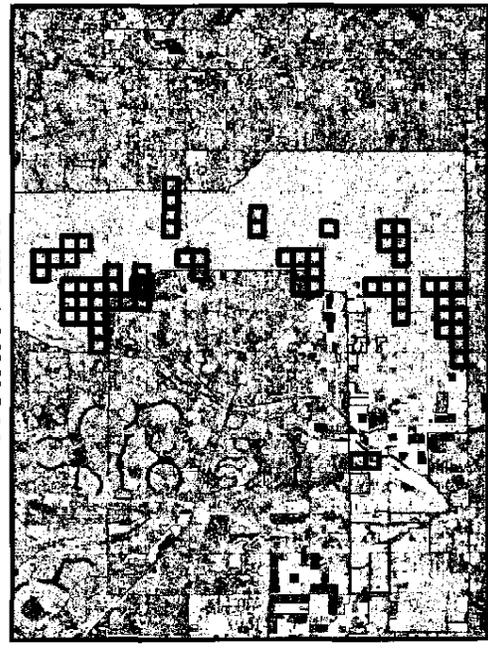
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Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- Crack_Seal_Areas

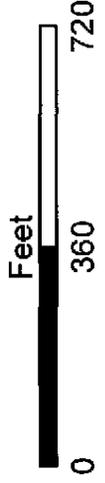
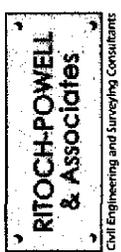
VICINITY MAP



Prepared For:



Prepared By:



IMPROVEMENT EXHIBIT

EXHIBIT 24 of 63



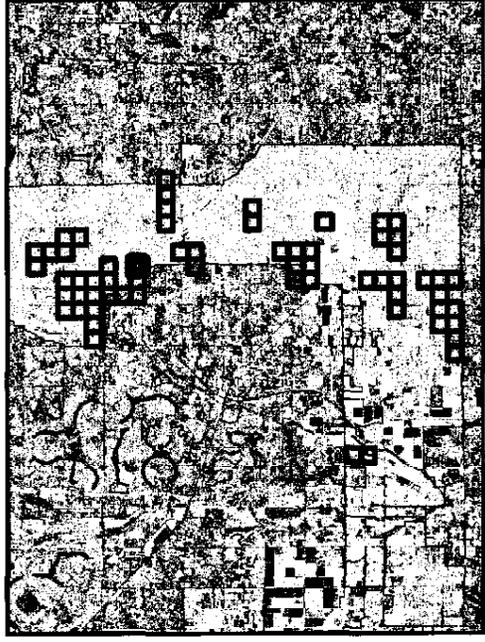
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Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- Crack_Seal_Areas

VICINITY MAP



Prepared For:

Prepared By:



**RITZCH-POWELL
& Associates**

Civil Engineering and Surveying Consultants



IMPROVEMENT EXHIBIT

EXHIBIT 25 of 63



MATCH LINE TO EXHIBIT #26

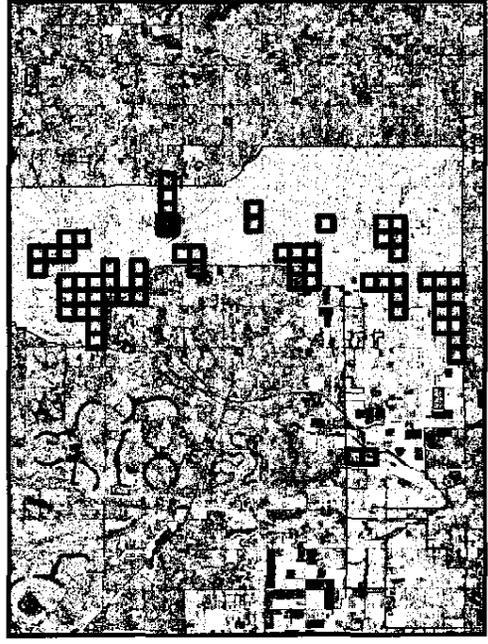
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Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- Crack_Seal_Areas

VICINITY MAP



Prepared For:

Prepared By:



**RITICH-POWELL
& Associates**

Civil Engineering and Surveying Consultants

Feet



720

360

0

IMPROVEMENT EXHIBIT

EXHIBIT 26 of 63

NORTH



MATCH LINE TO EXHIBIT #25

MATCH LINE TO EXHIBIT #27

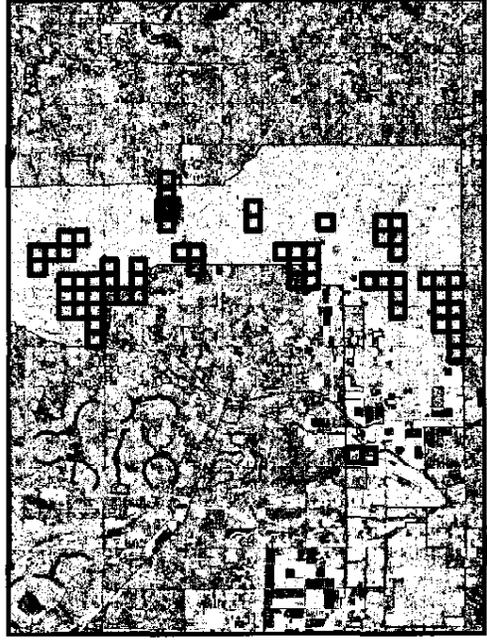
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Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- Crack_Seal_Areas

VICINITY MAP



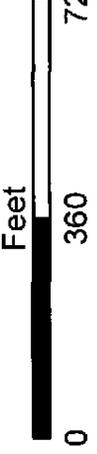
Prepared For:

Prepared By:



RITICH-POWELL & Associates

Civil Engineering and Surveying Consultants



IMPROVEMENT EXHIBIT

EXHIBIT 27 of 63



MATCH LINE TO EXHIBIT #28

MATCH LINE TO EXHIBIT #26

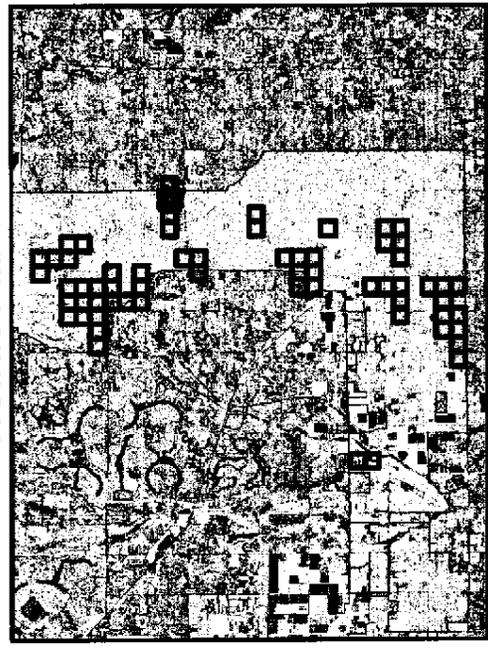
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Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- Crack_Seal_Areas

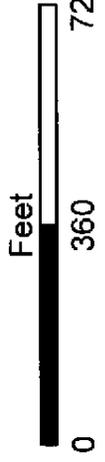
VICINITY MAP



Prepared For:

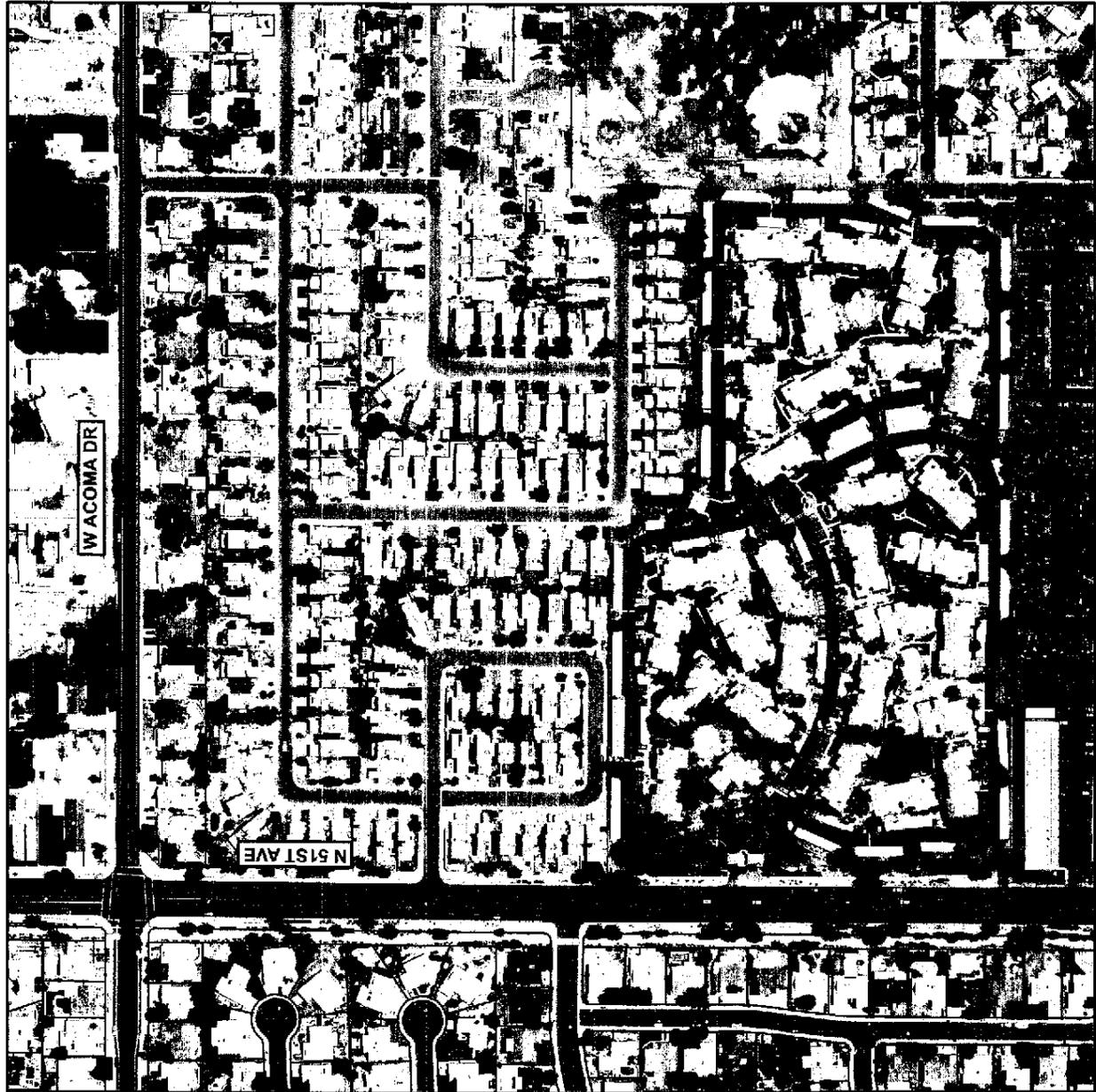


Prepared By:



IMPROVEMENT EXHIBIT

EXHIBIT 28 of 63



MATCH LINE TO EXHIBIT #27

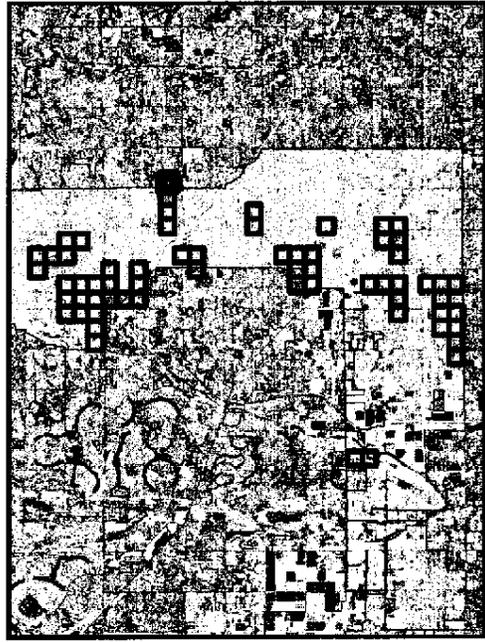
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Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- Crack_Seal_Areas

VICINITY MAP



Prepared For:



Prepared By:

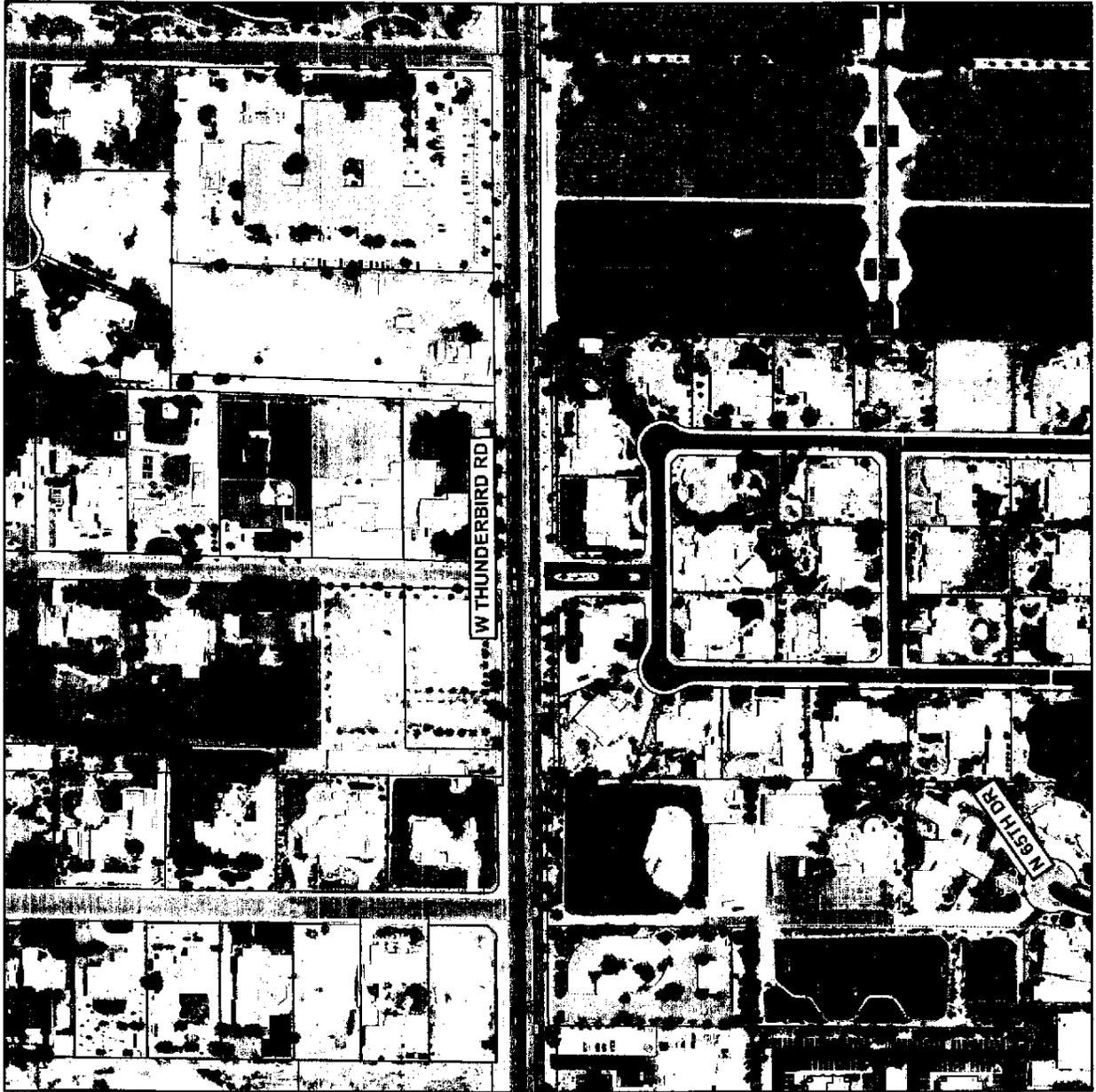
RITICH-PCWELL
& Associates

Civil Engineering and Surveying Consultants



IMPROVEMENT EXHIBIT

EXHIBIT 29 of 63



MATCH LINE TO EXHIBIT #31

Feet



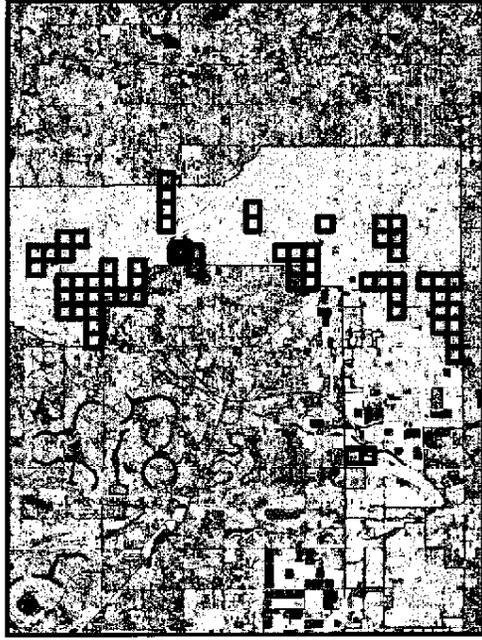
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Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- ▬ Crack_Seal_Areas

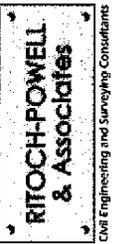
VICINITY MAP



Prepared For:



Prepared By:



IMPROVEMENT EXHIBIT

EXHIBIT 30 of 63



MATCH LINE TO EXHIBIT #31

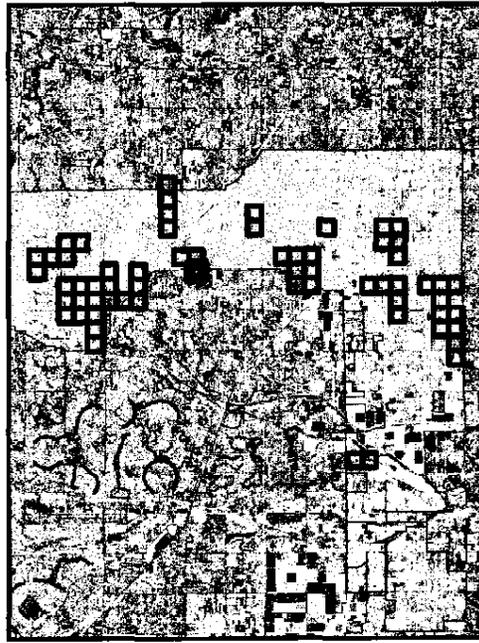
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Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- Crack_Seal_Areas

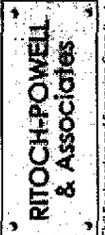
VICINITY MAP



Prepared For:



Prepared By:



Civil Engineering and Surveying Consultants

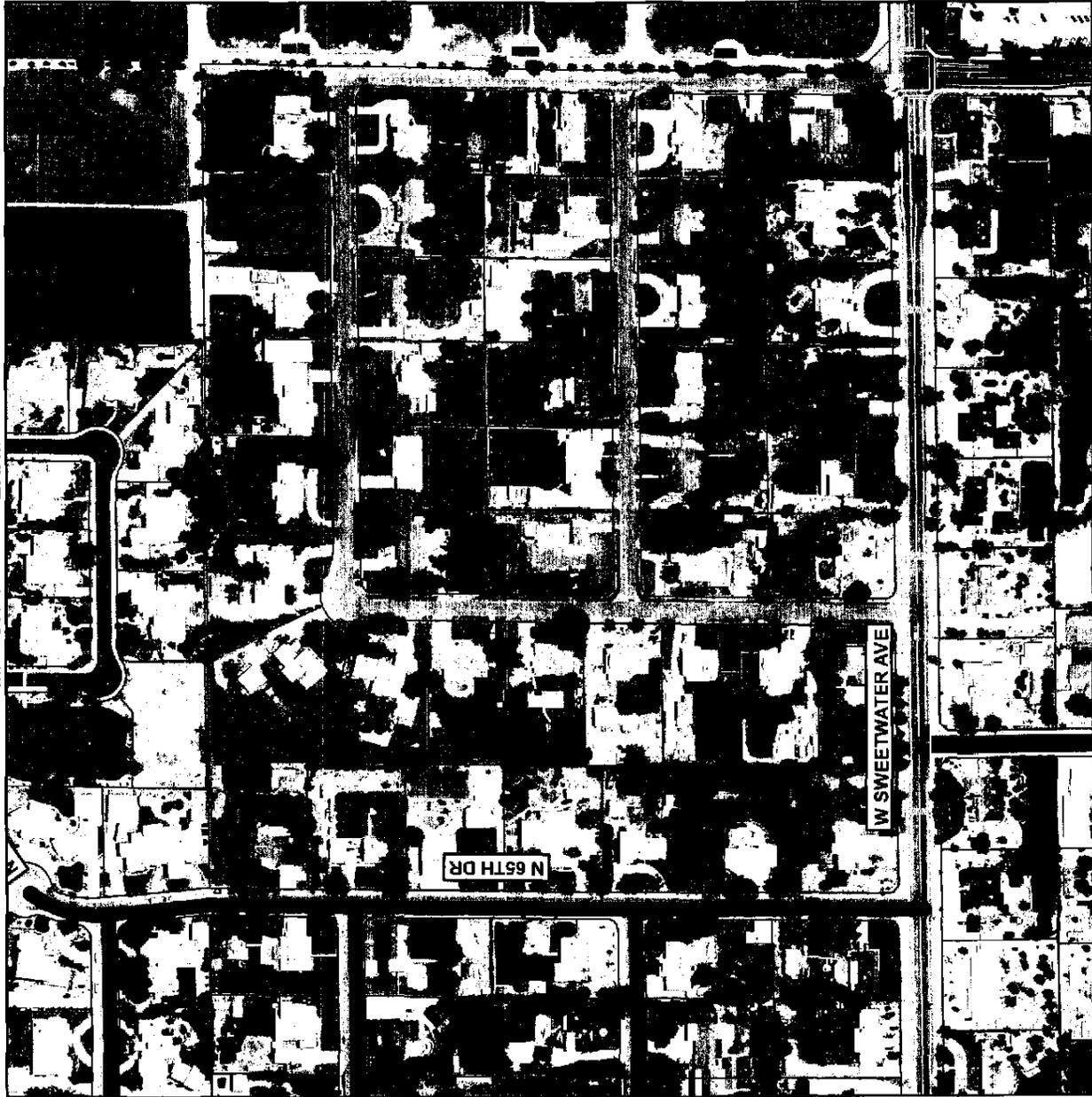
Feet



IMPROVEMENT EXHIBIT

EXHIBIT 31 of 63

MATCH LINE TO EXHIBIT #29



MATCH LINE TO EXHIBIT #30



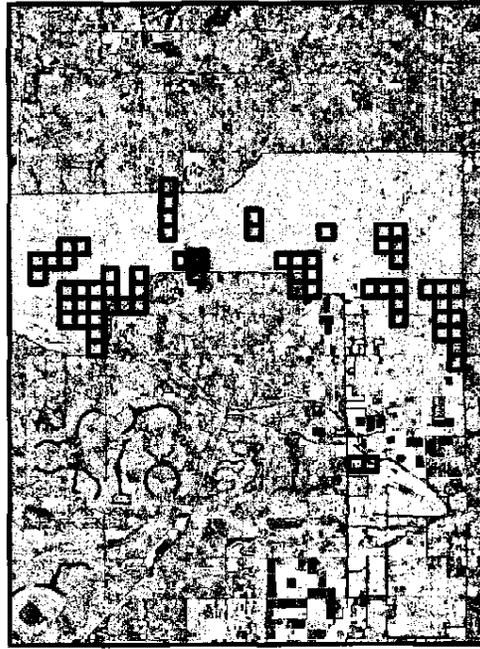
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Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- Crack_Seal_Areas

VICINITY MAP



Prepared For:



Prepared By:

RITZCH-POWERLL
& Associates

Civil Engineering and Surveying Consultants

Feet



0 360 720

IMPROVEMENT EXHIBIT

EXHIBIT 37 of 63

MATCH LINE TO EXHIBIT #34



MATCH LINE TO EXHIBIT #36

MATCH LINE TO EXHIBIT #40

Feet



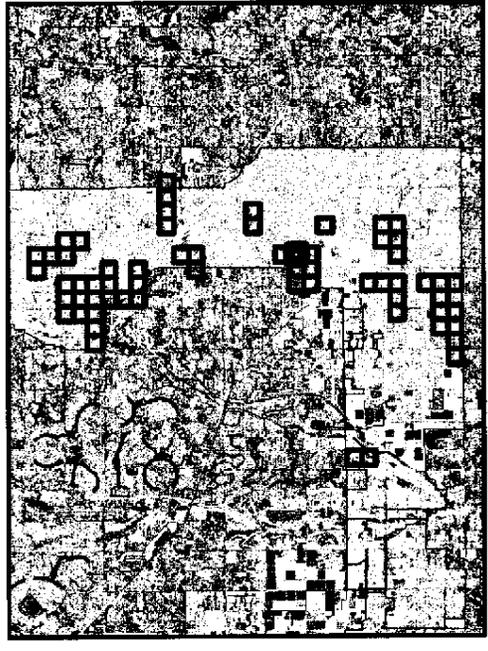
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Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- Crack_Seal_Areas

VICINITY MAP



Prepared For:



Prepared By:



IMPROVEMENT EXHIBIT

EXHIBIT 38 of 63

MATCH LINE TO EXHIBIT #35



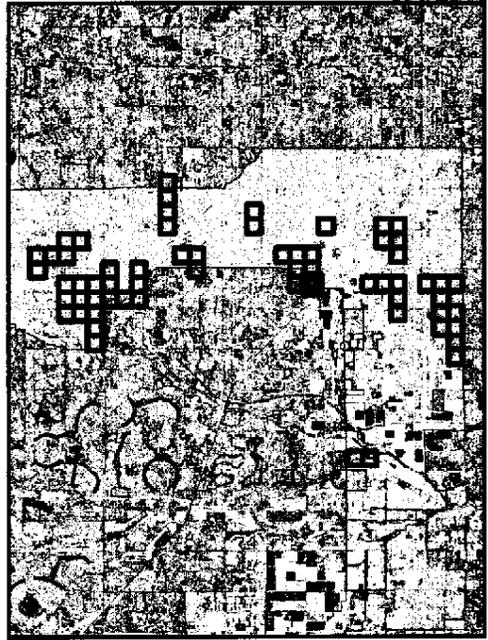
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Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- Crack_Seal_Areas

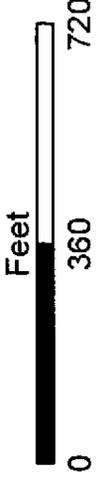
VICINITY MAP



Prepared For:



Prepared By:



IMPROVEMENT EXHIBIT

EXHIBIT 39 of 63

MATCH LINE TO EXHIBIT #36



MATCH LINE TO EXHIBIT #38

MATCH LINE TO EXHIBIT #40

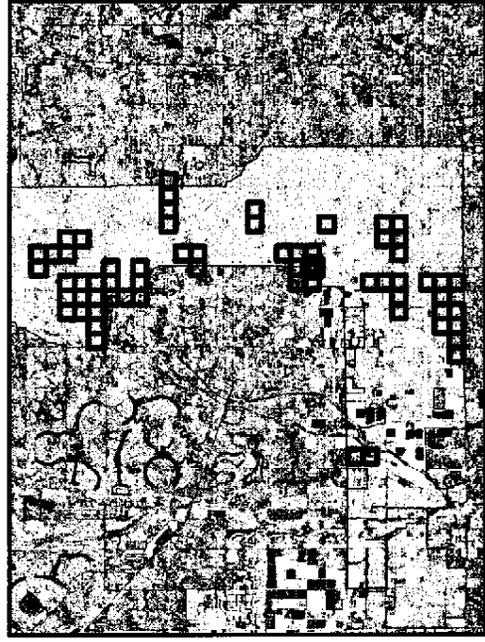
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Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- Crack_Seal_Areas

VICINITY MAP



Prepared For:



Prepared By:

RITICH-POWELL & Associates

Civil Engineering and Surveying Consultants

Feet



0

360

720

IMPROVEMENT EXHIBIT

EXHIBIT 32 of 63

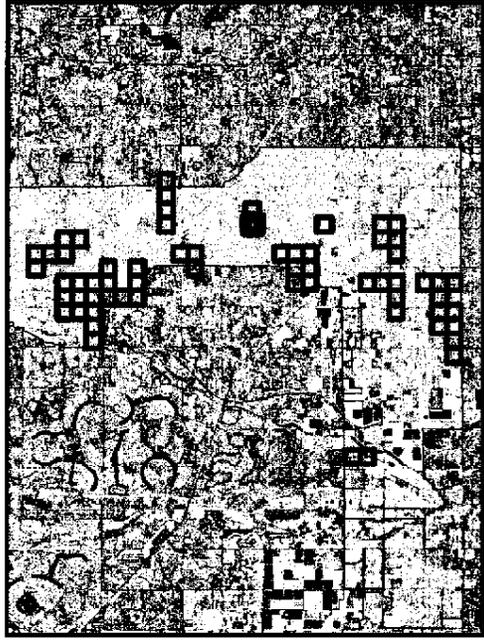


MATCH LINE TO EXHIBIT #33

Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- ▬ Crack_Seal_Areas

VICINITY MAP



CONSTRUCTION NOTES:

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Prepared For:



Prepared By:

**RITICH-POWELL
& Associates**

Civil Engineering and Surveying Consultants



IMPROVEMENT EXHIBIT

EXHIBIT 33 of 63



MATCH LINE TO EXHIBIT #32

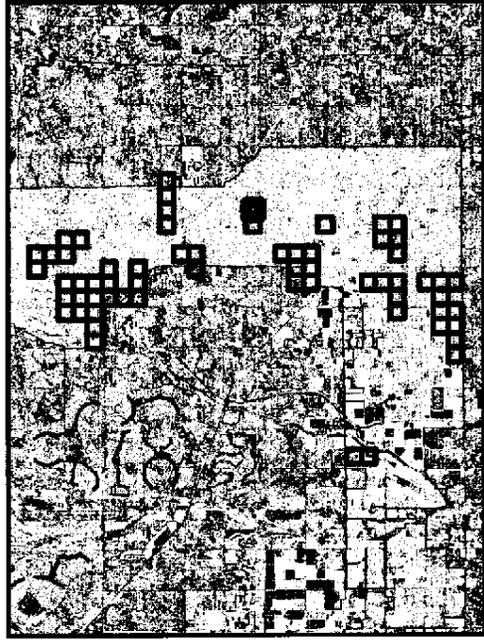
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Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- Crack_Seal_Areas

VICINITY MAP



Prepared For:



Prepared By:

RITICH-POWELL
& Associates

Civil Engineering and Surveying Consultants

Feet



720

360

0

IMPROVEMENT EXHIBIT

EXHIBIT 34 of 63



MATCH LINE TO EXHIBIT #37

Feet



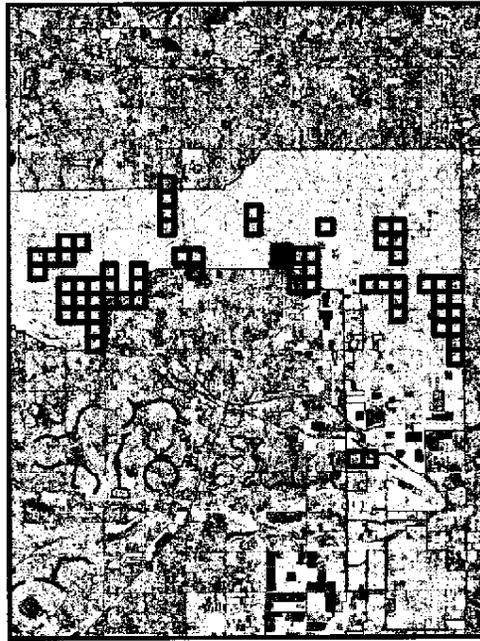
CONSTRUCTION NOTES:

- 1) ALL ASPHALT REPAIR AREA LOCATIONS SHOWN ARE APPROXIMATE. ACTUAL LOCATIONS ARE AS MARKED IN THE FIELD.
- 2) ALL STREETS IDENTIFIED TO RECEIVE SLURRY SEAL SHALL HAVE A TYPE II SLURRY APPLIED.
- 3) SPECIFIC LOCATION INFORMATION AND IMPROVEMENT QUANTITIES CAN BE FOUND IN THE APPLICABLE IMPROVEMENT INDEX.

Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- Crack_Seal_Areas

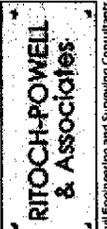
VICINITY MAP



Prepared For:



Prepared By:



IMPROVEMENT EXHIBIT

EXHIBIT 35 of 63



MATCH LINE TO EXHIBIT #36

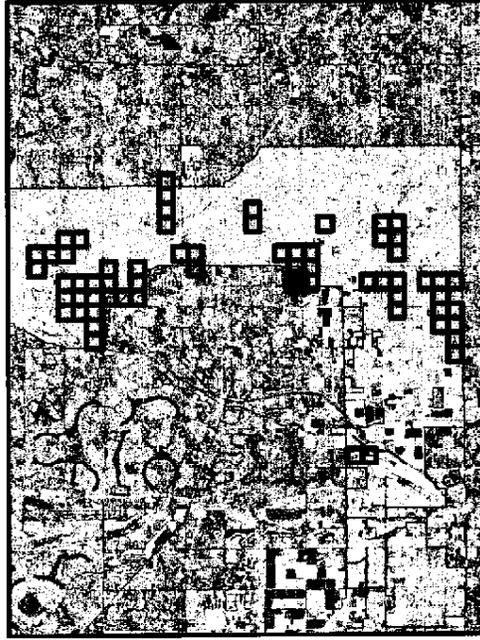
CONSTRUCTION NOTES:

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Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- Crack_Seal_Areas

VICINITY MAP



Prepared For:



Prepared By:

RITTOCH-POWELL
& Associates

Civil Engineering and Surveying Consultants

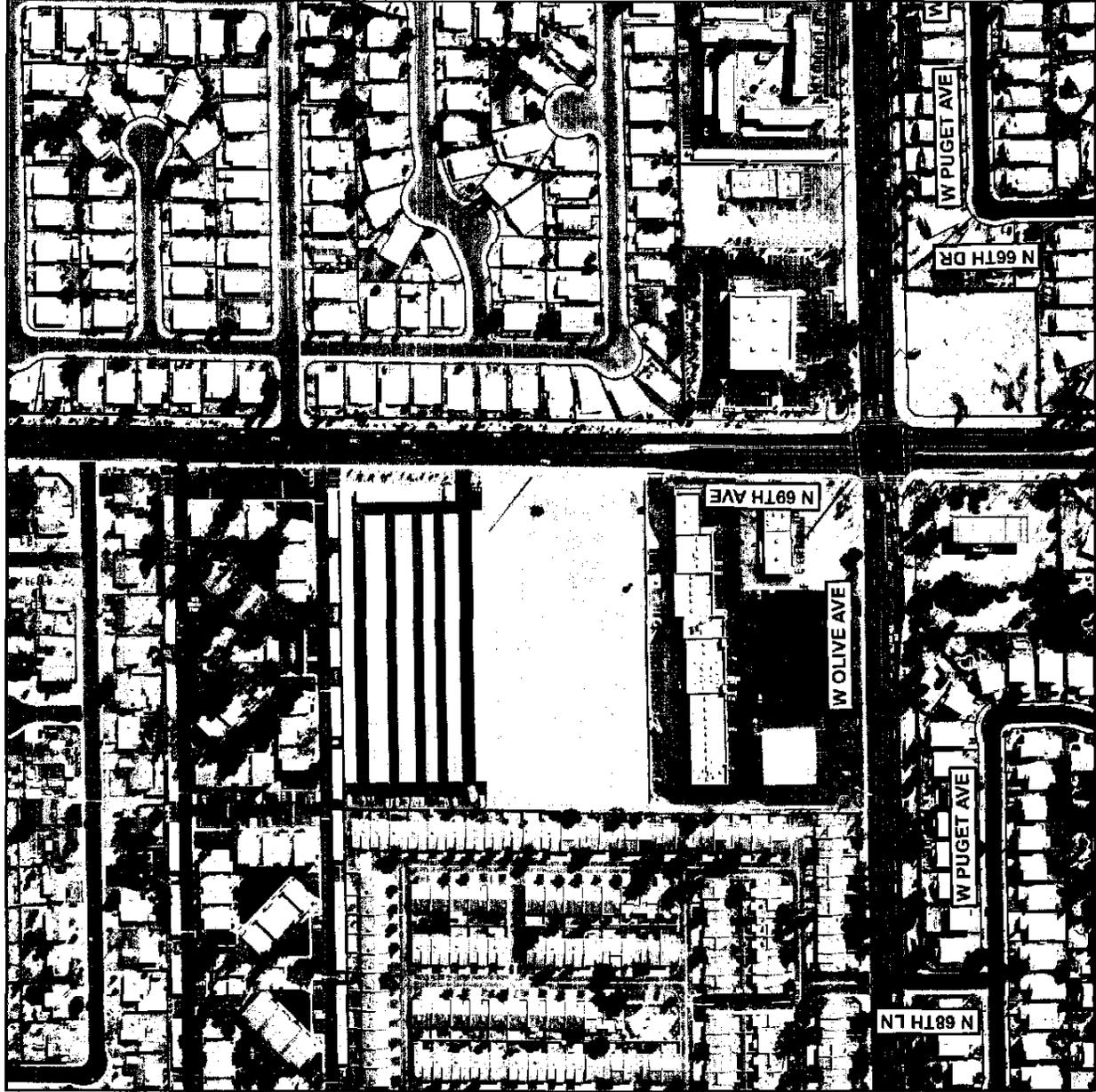
MATCH LINE EXHIBIT #38

Feet



IMPROVEMENT EXHIBIT

EXHIBIT 36 of 63



MATCH LINE TO EXHIBIT #37

MATCH LINE TO EXHIBIT #35

Feet



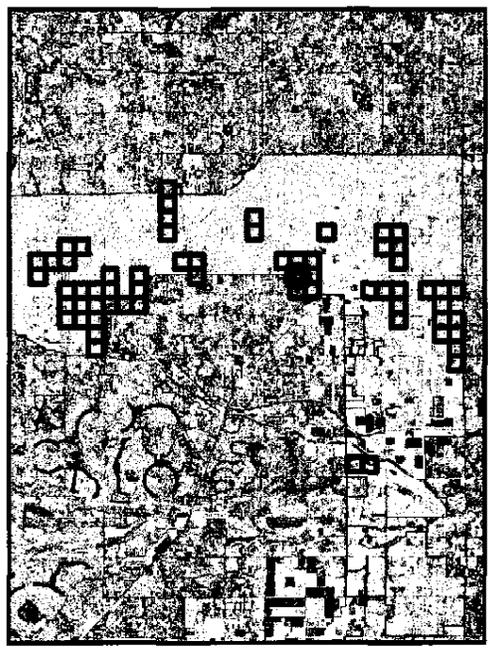
CONSTRUCTION NOTES:

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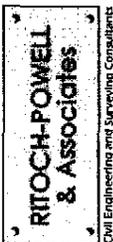
Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- Crack_Seal_Areas

VICINITY MAP



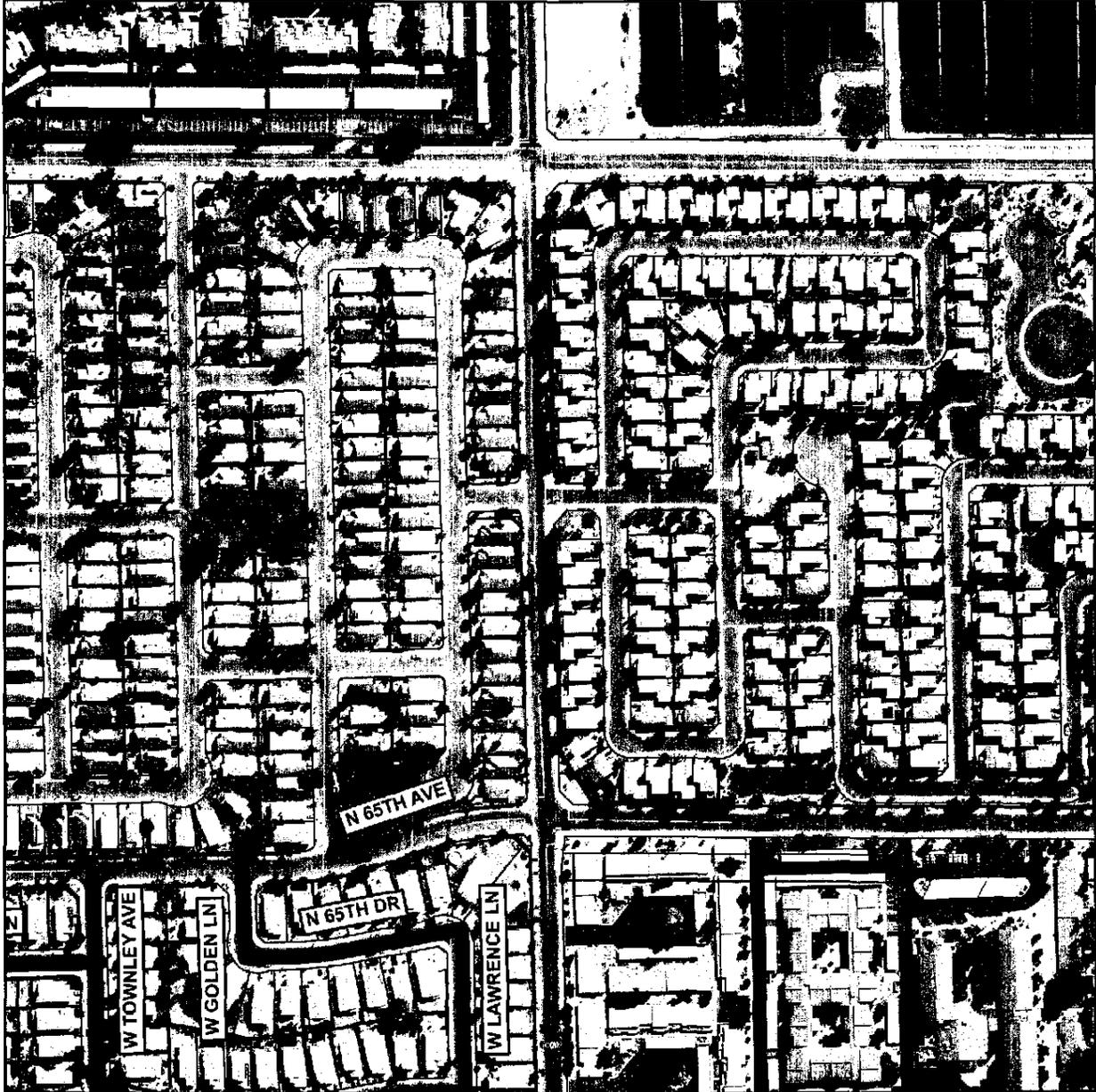
Prepared For:  GLENDALE

Prepared By:  RITOCH-POWELL & Associates
Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

EXHIBIT 40 of 63

MATCH LINE TO EXHIBIT #37



MATCH LINE TO EXHIBIT #39

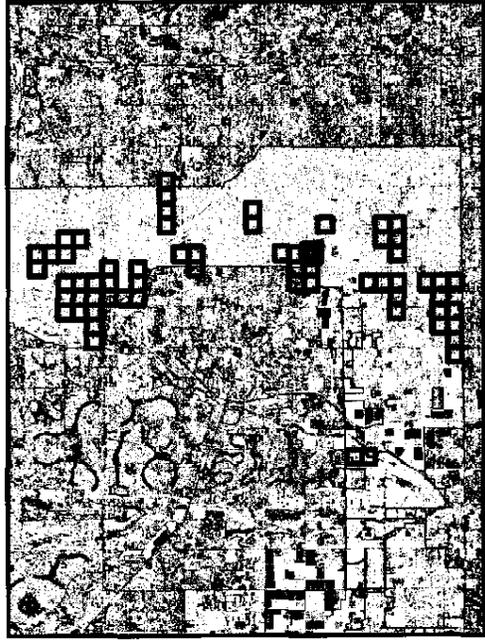
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Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- Crack_Seal_Areas

VICINITY MAP



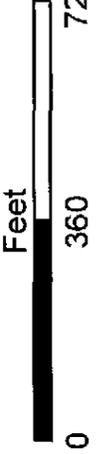
Prepared For:



Prepared By:

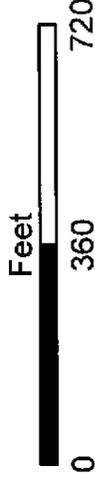
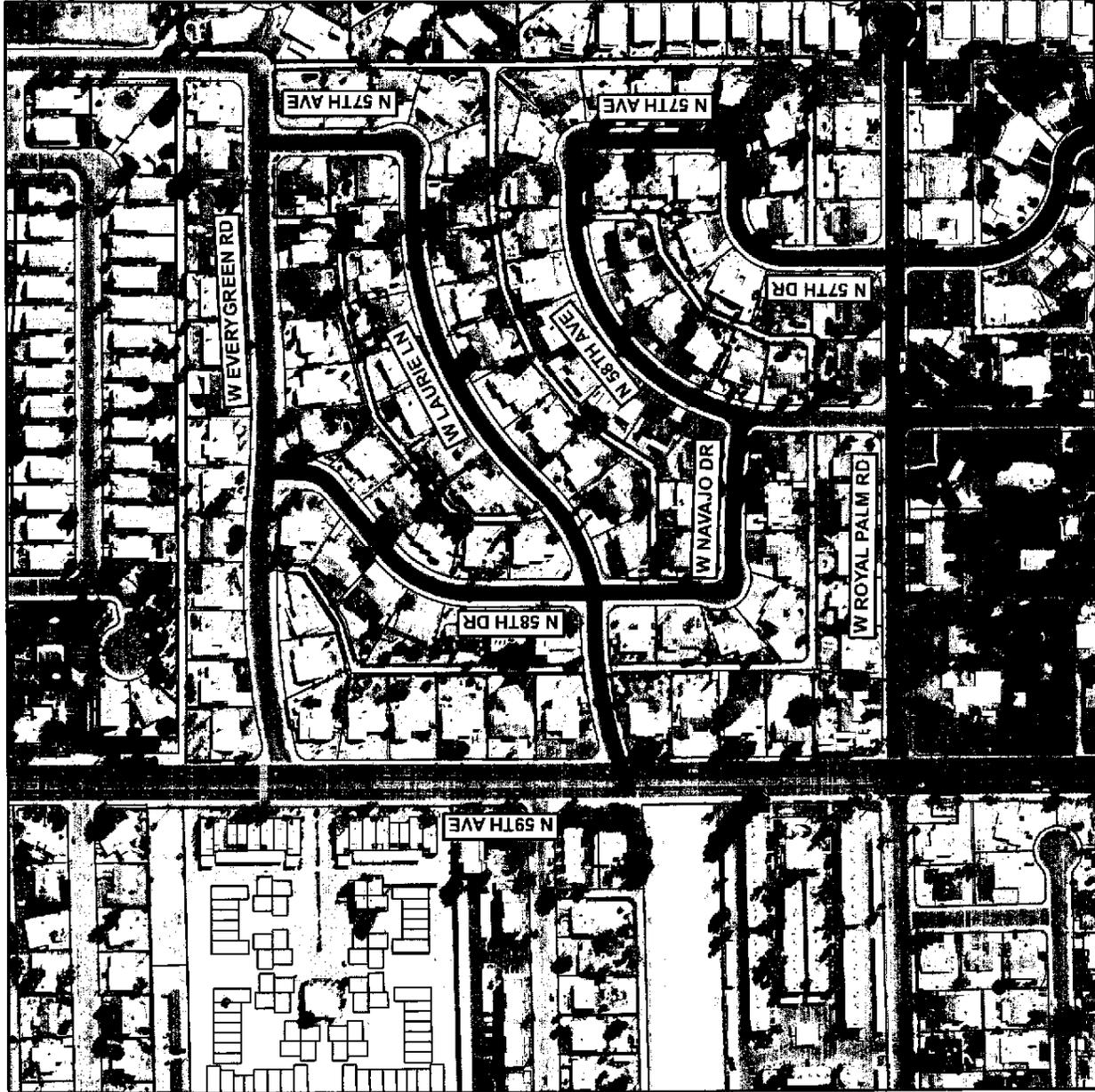
**RITICH-POWELL
& Associates**

Civil Engineering and Surveying Consultants



IMPROVEMENT EXHIBIT

EXHIBIT 41 of 63



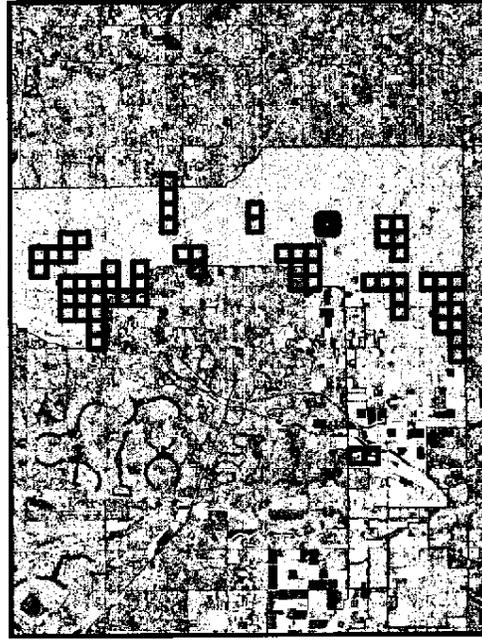
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Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- Crack_Seal_Areas

VICINITY MAP



Prepared For:  GLENDALE

Prepared By:

RITZCH-POWERLL & Associates
Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

EXHIBIT 42 of 63



MATCH LINE TO EXHIBIT #43



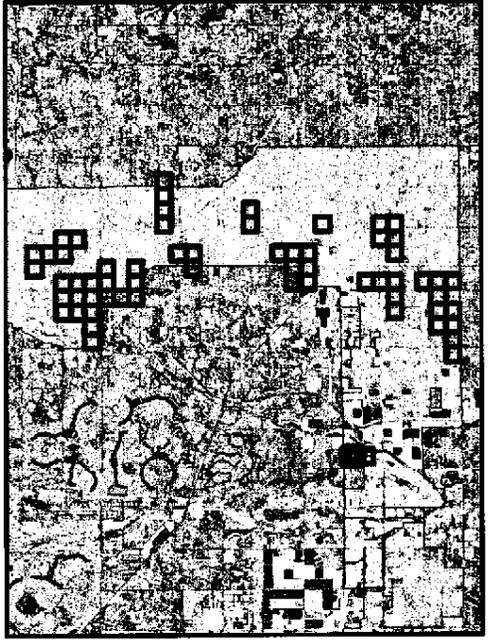
CONSTRUCTION NOTES:

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Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- Crack_Seal_Areas

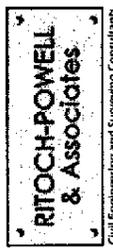
VICINITY MAP



Prepared For:



Prepared By:



IMPROVEMENT EXHIBIT

EXHIBIT 43 of 63

MATCH LINE TO EXHIBIT #42



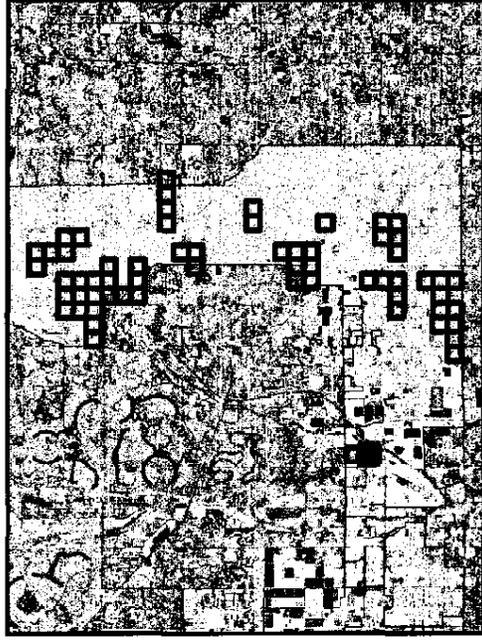
CONSTRUCTION NOTES:

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Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- ▬ Crack_Seal_Areas

VICINITY MAP



Prepared For:



Prepared By:

**RITICH-POWELL
& Associates**

Civil Engineering and Surveying Consultants

Feet



720

360

0

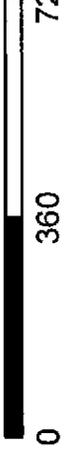
IMPROVEMENT EXHIBIT

EXHIBIT 44 of 63



MATCH LINE TO EXHIBIT #45

Feet



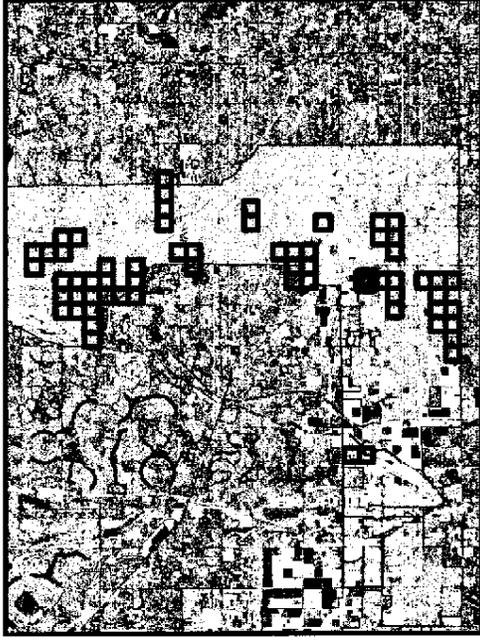
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Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- ▬ Crack_Seal_Areas

VICINITY MAP



Prepared For:

Prepared By:



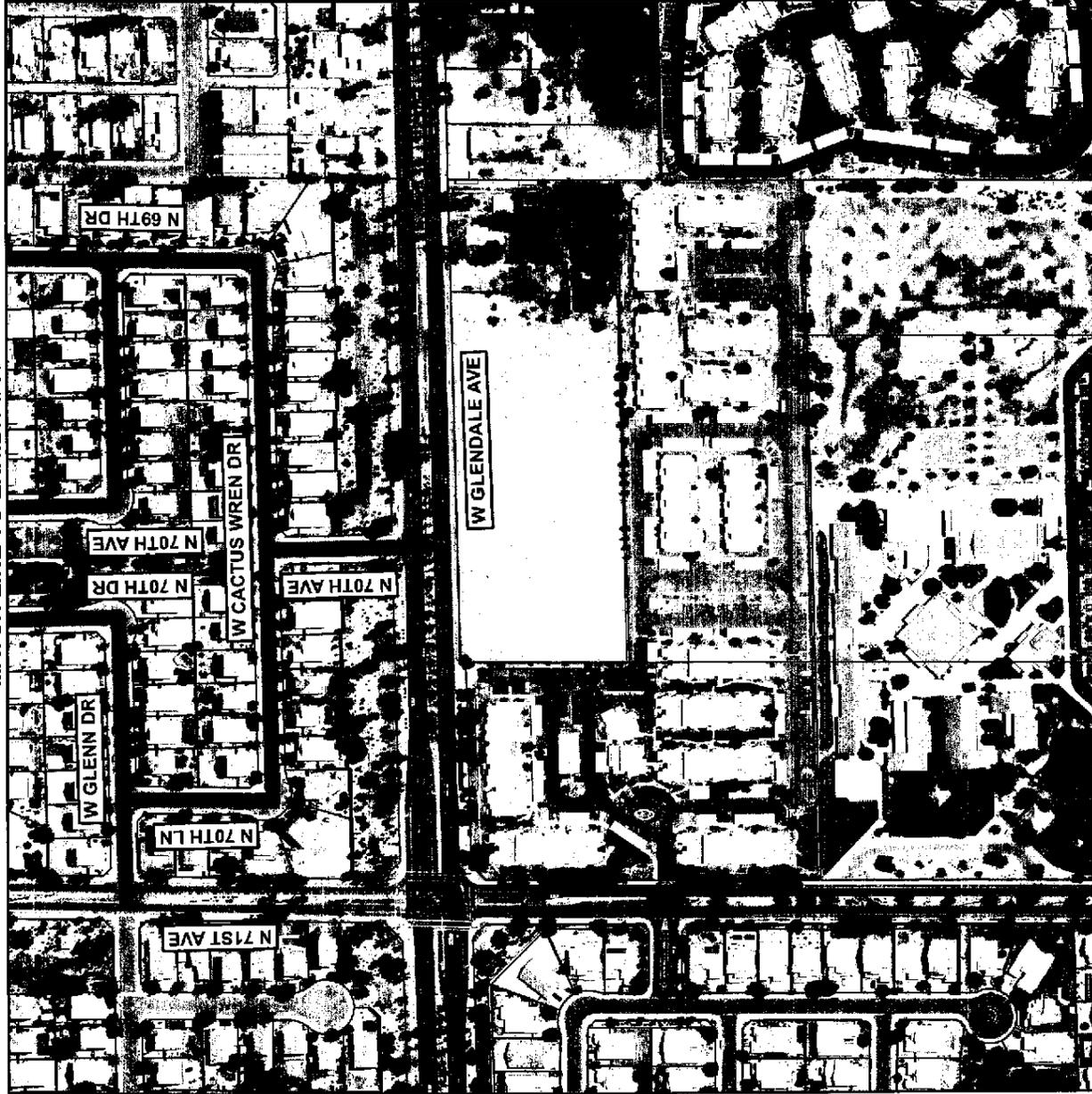
RITICH-POWERLL & Associates

Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

EXHIBIT 45 of 63

MATCH LINE TO EXHIBIT #44



MATCH LINE TO EXHIBIT #50

Feet



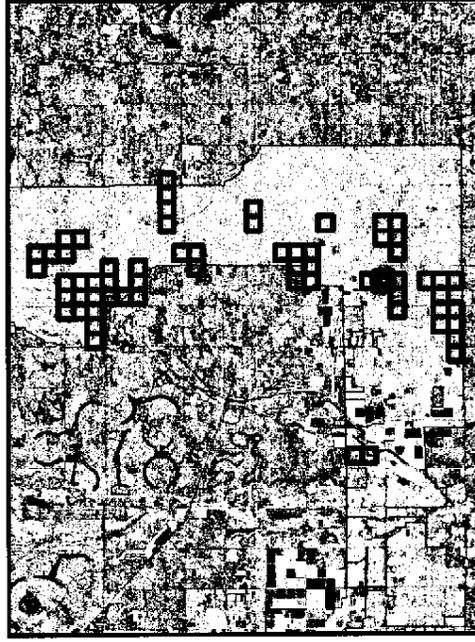
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Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- Crack_Seal_Areas

VICINITY MAP



Prepared For:



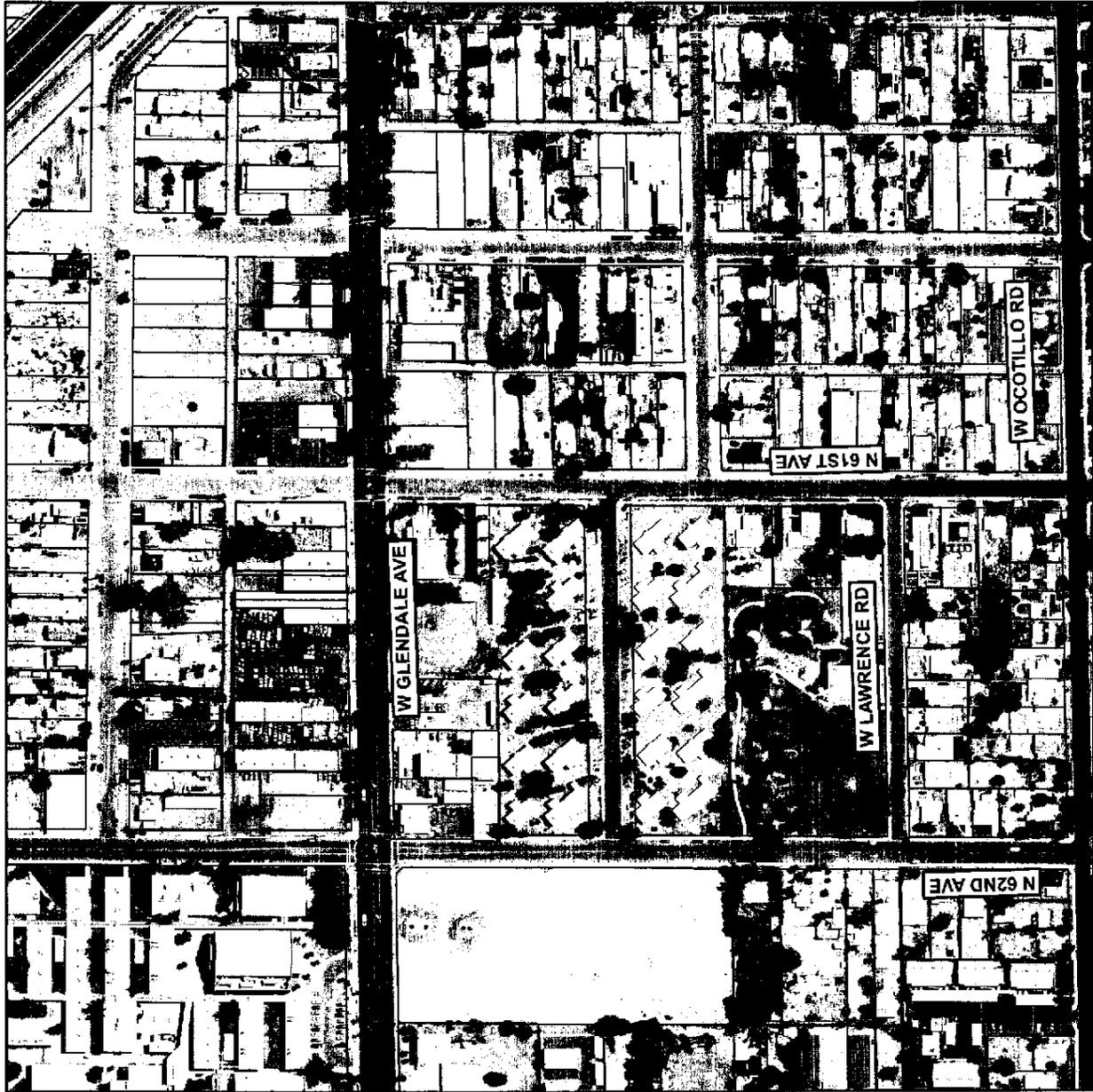
Prepared By:

RITCOH-POWELL
& Associates

Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

EXHIBIT 46 of 63



MATCH LINE TO EXHIBIT #47

MATCH LINE TO EXHIBIT #52

Feet



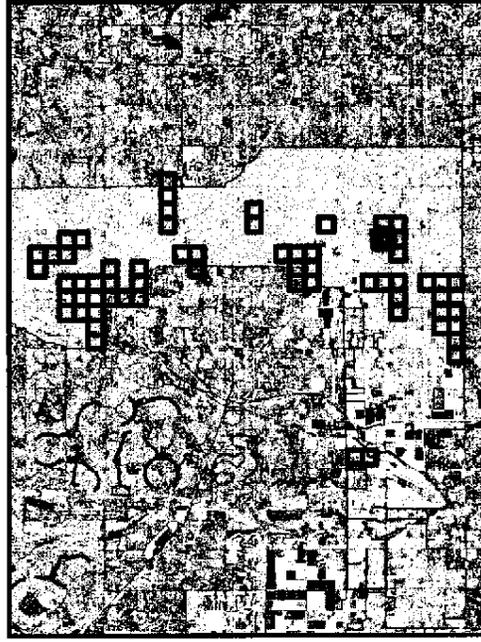
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Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- ▬ Crack_Seal_Areas

VICINITY MAP



Prepared For:



Prepared By:

RITICH-POWELL & Associates

Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

EXHIBIT 47 of 63



MATCH LINE TO EXHIBIT #46

MATCH LINE TO EXHIBIT #53

Feet



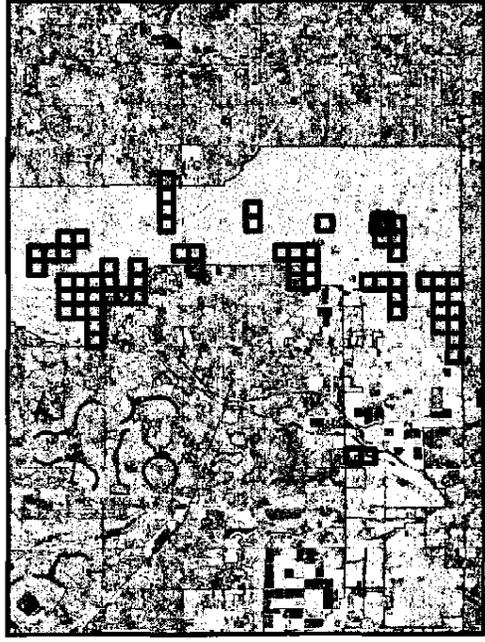
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Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- Crack_Seal_Areas

VICINITY MAP



Prepared For:



GLENDALE

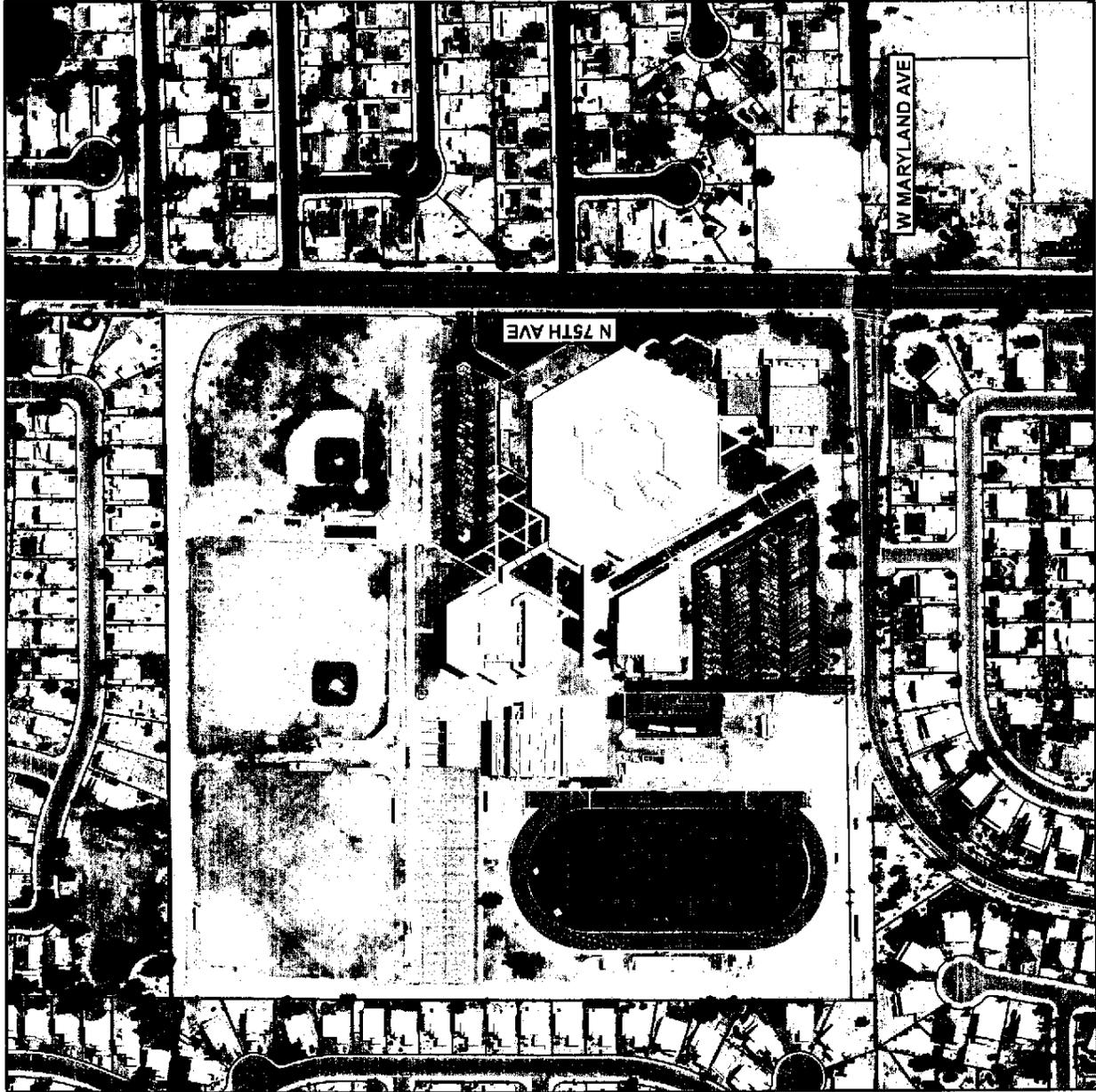
Prepared By:

RITICH-POWELL
& Associates

Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

EXHIBIT 48 of 63



MATCH LINE TO EXHIBIT #49

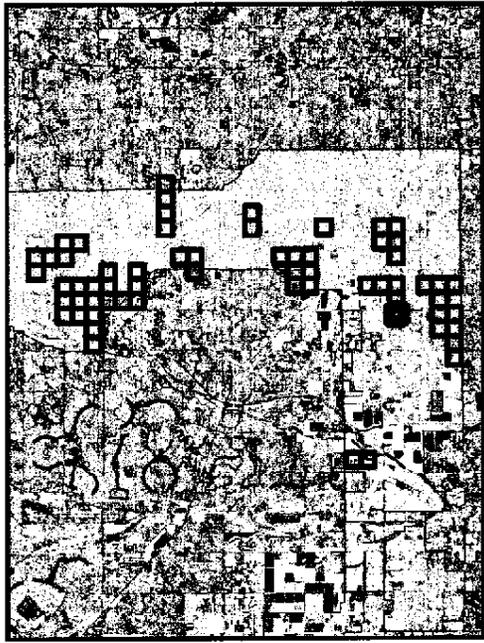
CONSTRUCTION NOTES:

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Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- Crack_Seal_Areas

VICINITY MAP



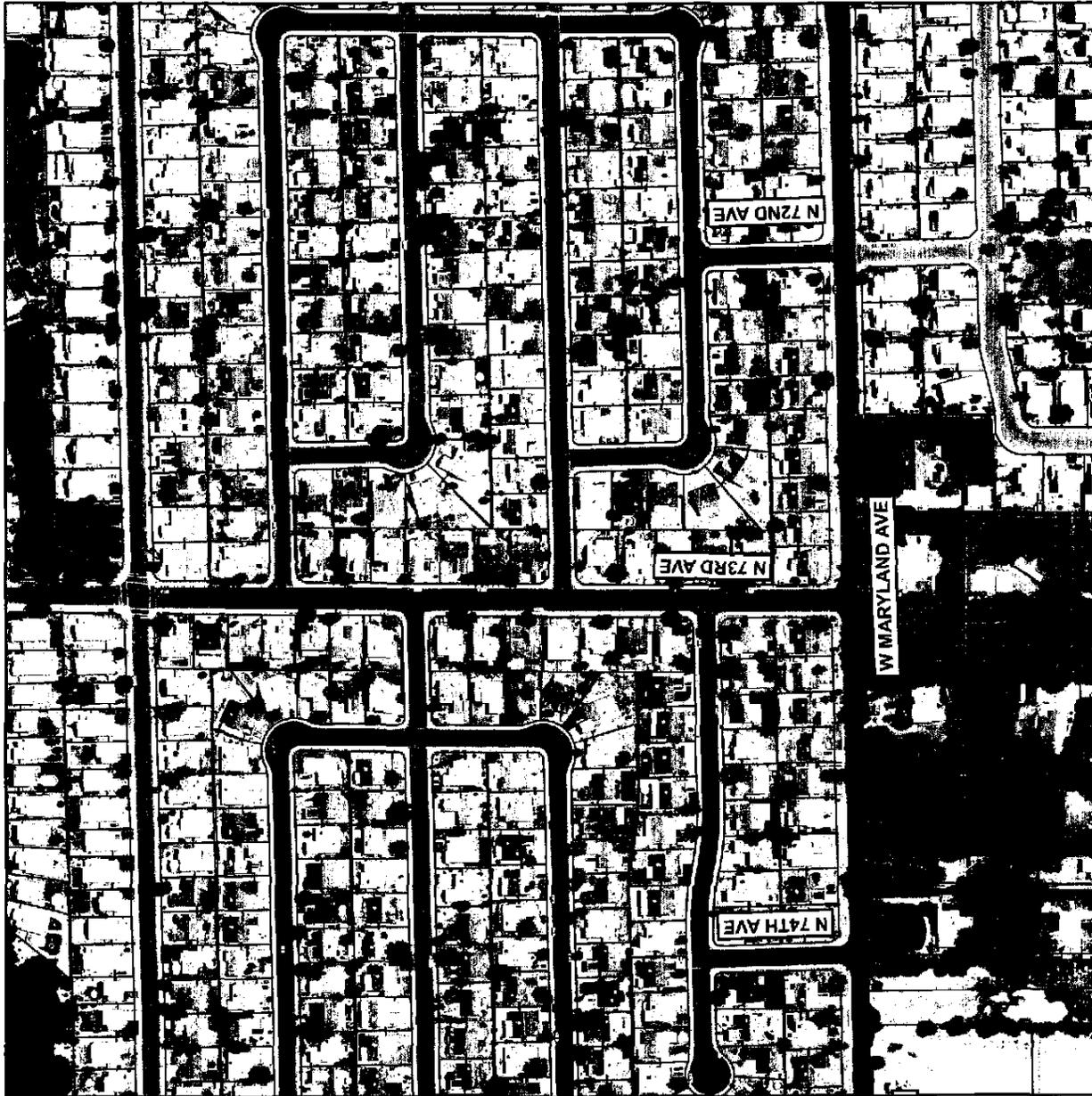
Prepared For: Prepared By:



RITICH-POWER & ASSOCIATES
Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

EXHIBIT 49 of 63



MATCH LINE TO EXHIBIT #48

MATCH LINE TO EXHIBIT #50

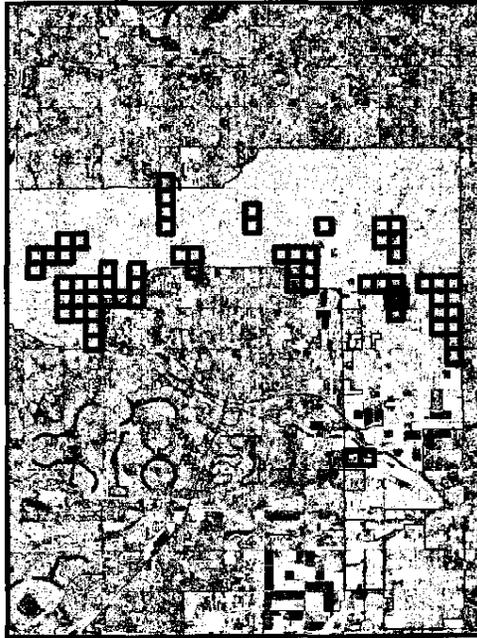
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Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- Crack_Seal_Areas

VICINITY MAP



Prepared For:



Prepared By:

RITICH-POWELL & Associates

Civil Engineering and Surveying Consultants



IMPROVEMENT EXHIBIT

EXHIBIT 50 of 63

MATCH LINE TO EXHIBIT #45



MATCH LINE TO EXHIBIT #49

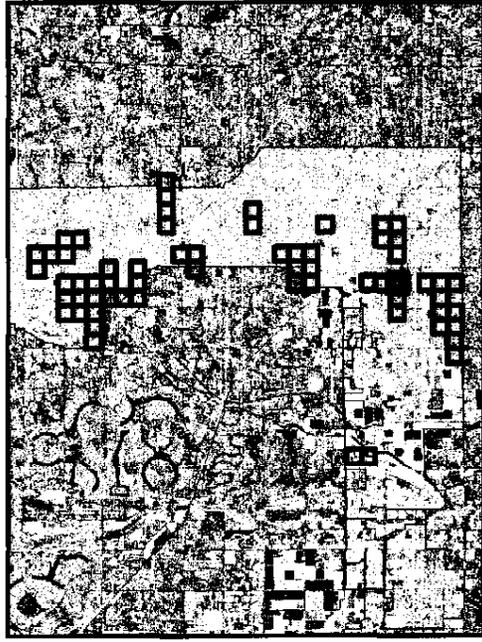
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Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- Crack_Seal_Areas

VICINITY MAP



Prepared For:



Prepared By:

**RITICH-POWELL
& Associates**

Civil Engineering and Surveying Consultants



IMPROVEMENT EXHIBIT

EXHIBIT 51 of 63



MATCH LINE TO EXHIBIT #52

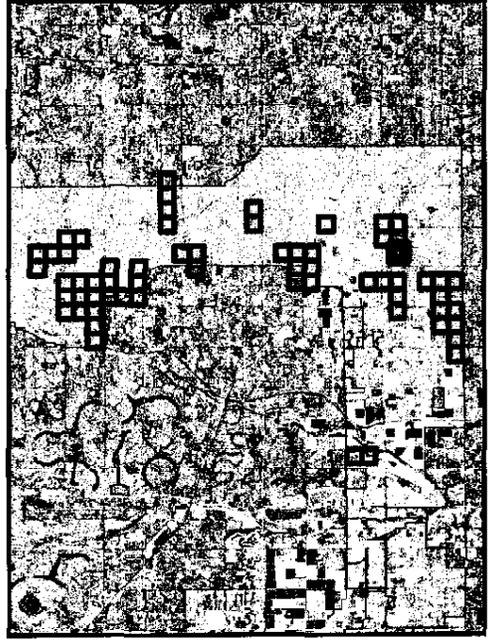
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Legend

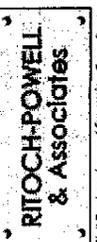
- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- Crack_Seal_Areas

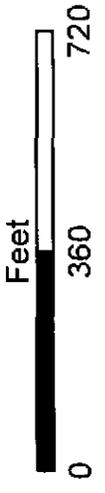
VICINITY MAP



Prepared For:  GLENDALE

Prepared By:

 RITOCH-POWELL & Associates
Civil Engineering and Surveying Consultants



IMPROVEMENT EXHIBIT

EXHIBIT 52 of 63

MATCH LINE TO EXHIBIT #46



MATCH LINE TO EXHIBIT #51

MATCH LINE TO EXHIBIT #53

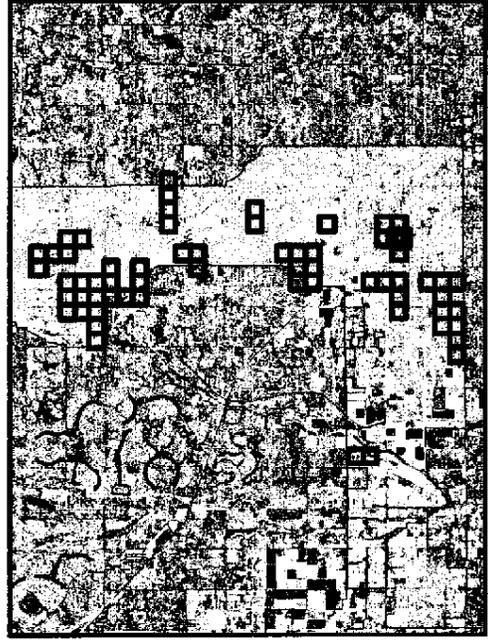
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Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- ▬ Crack_Seal_Areas

VICINITY MAP



Prepared For:

Prepared By:



Feet



0 360 720

RITICH-POWERLL & Associates

Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

EXHIBIT 53 of 63

MATCH LINE TO EXHIBIT #47



MATCH LINE TO EXHIBIT #52

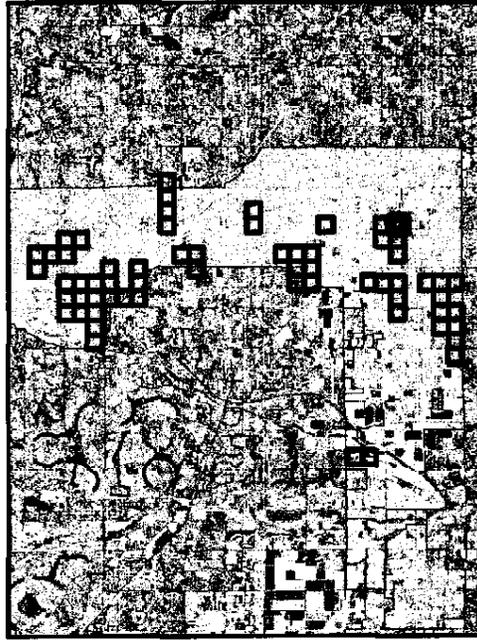
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Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- Crack_Seal_Areas

VICINITY MAP



Prepared For:



Prepared By:

**RITICH-POWELL
& Associates**

Civil Engineering and Surveying Consultants

Feet



0

360

720

IMPROVEMENT EXHIBIT

EXHIBIT 54 of 63



MATCH LINE TO EXHIBIT #58

Feet



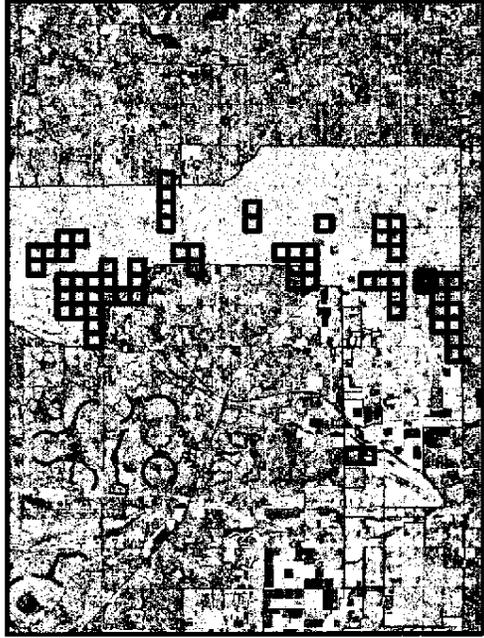
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Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- Crack_Seal_Areas

VICINITY MAP



Prepared For:



Prepared By:

RITICH-POWERLL & Associates

Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

EXHIBIT 55 of 63



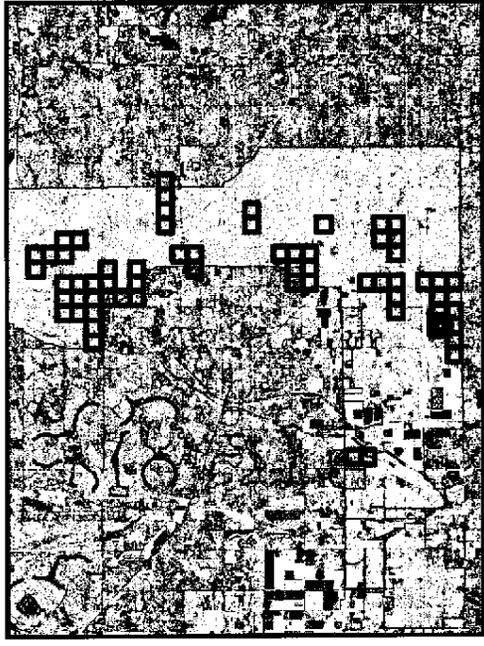
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Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- Crack_Seal_Areas

VICINITY MAP



Prepared For: Prepared By:



RITICH-POWERELL & Associates
Civil Engineering and Surveying Consultants

MATCH LINE TO EXHIBIT #61



IMPROVEMENT EXHIBIT

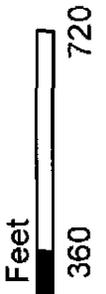
EXHIBIT 56 of 63



MATCH LINE TO EXHIBIT #55

MATCH LINE TO EXHIBIT #57

MATCH LINE TO EXHIBIT #62



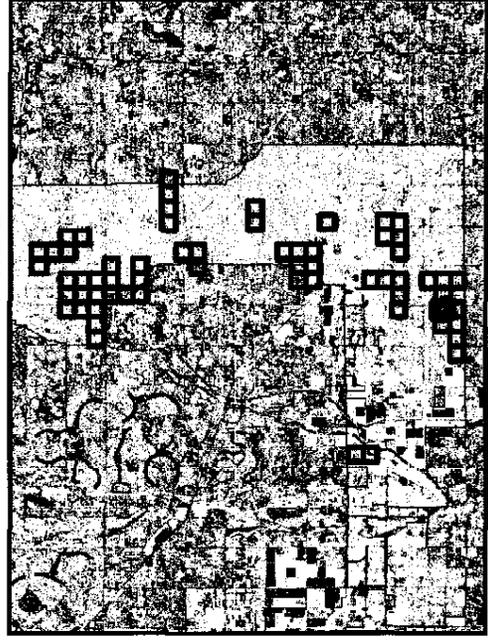
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Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- ▬ Crack_Seal_Areas

VICINITY MAP



Prepared For: Prepared By:



IMPROVEMENT EXHIBIT

EXHIBIT 57 of 63



MATCH LINE TO EXHIBIT #58

MATCH LINE TO EXHIBIT #56

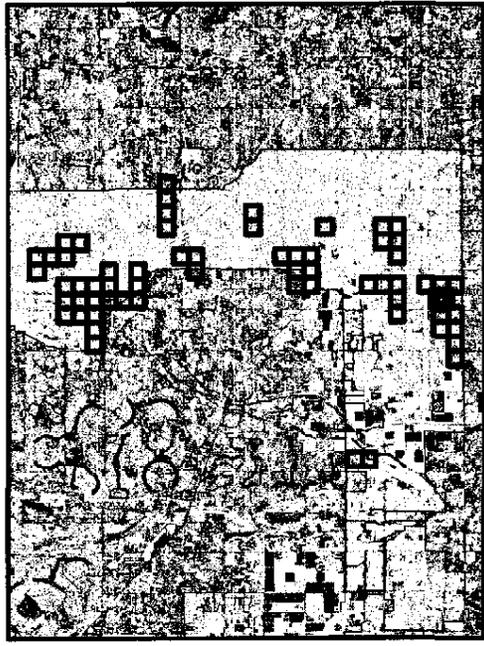
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Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- Crack_Seal_Areas

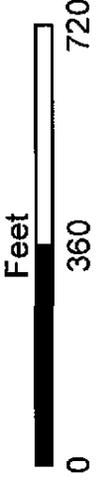
VICINITY MAP



Prepared For:  GLENDALE

Prepared By:

RITICH-POWELL & Associates
Civil Engineering and Surveying Consultants



IMPROVEMENT EXHIBIT

EXHIBIT 58 of 63

MATCH LINE TO EXHIBIT #54



MATCH LINE TO EXHIBIT #57

MATCH LINE TO EXHIBIT #63

Feet



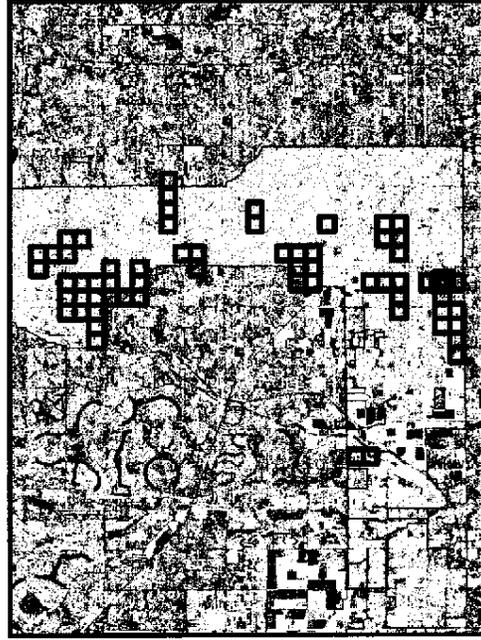
CONSTRUCTION NOTES:

- 1) ALL ASPHALT REPAIR AREA LOCATIONS SHOWN ARE APPROXIMATE. ACTUAL LOCATIONS ARE AS MARKED IN THE FIELD.
- 2) ALL STREETS IDENTIFIED TO RECEIVE SLURRY SEAL SHALL HAVE A TYPE II SLURRY APPLIED.
- 3) SPECIFIC LOCATION INFORMATION AND IMPROVEMENT QUANTITIES CAN BE FOUND IN THE APPLICABLE IMPROVEMENT INDEX.

Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- ▬ Crack_Seal_Areas

VICINITY MAP



Prepared For:



Prepared By:

RITICH-POWERLL & Associates

Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

EXHIBIT 59 of 63



MATCH LINE TO EXHIBIT #60

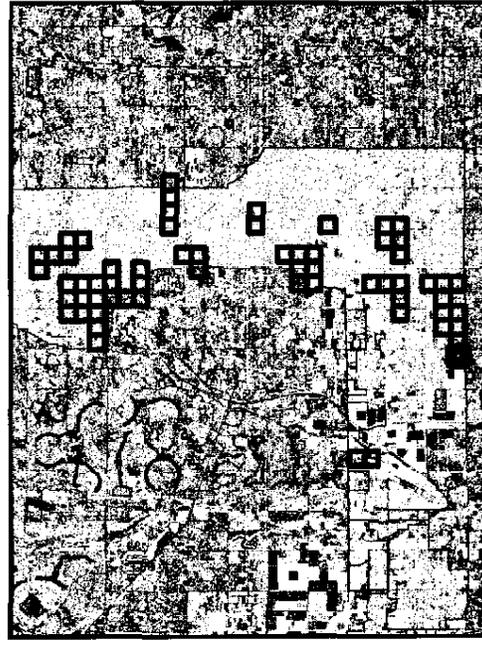
CONSTRUCTION NOTES:

- 1) ALL ASPHALT REPAIR AREA LOCATIONS SHOWN ARE APPROXIMATE. ACTUAL LOCATIONS ARE AS MARKED IN THE FIELD.
- 2) ALL STREETS IDENTIFIED TO RECEIVE SLURRY SEAL SHALL HAVE A TYPE II SLURRY APPLIED.
- 3) SPECIFIC LOCATION INFORMATION AND IMPROVEMENT QUANTITIES CAN BE FOUND IN THE APPLICABLE IMPROVEMENT INDEX.

Legend

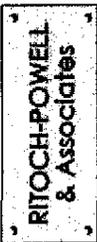
- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- Crack_Seal_Areas

VICINITY MAP



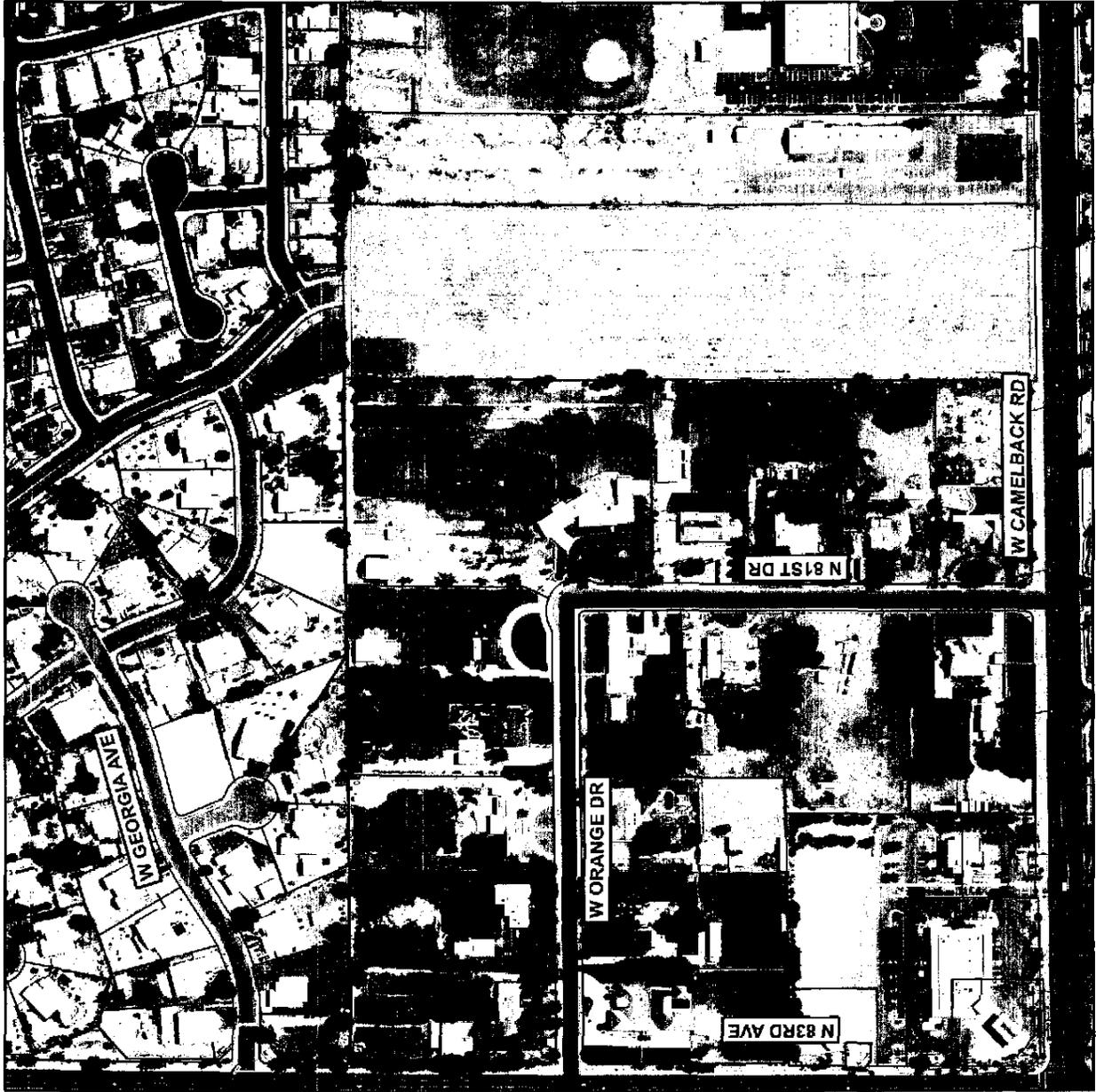
Prepared For:  GLENDALE

Prepared By:

 RITOCH-POWELL & Associates
Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

EXHIBIT 60 of 63



CONSTRUCTION NOTES:

- 1) ALL ASPHALT REPAIR AREA LOCATIONS SHOWN ARE APPROXIMATE. ACTUAL LOCATIONS ARE AS MARKED IN THE FIELD.
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- 3) SPECIFIC LOCATION INFORMATION AND IMPROVEMENT QUANTITIES CAN BE FOUND IN THE APPLICABLE IMPROVEMENT INDEX.

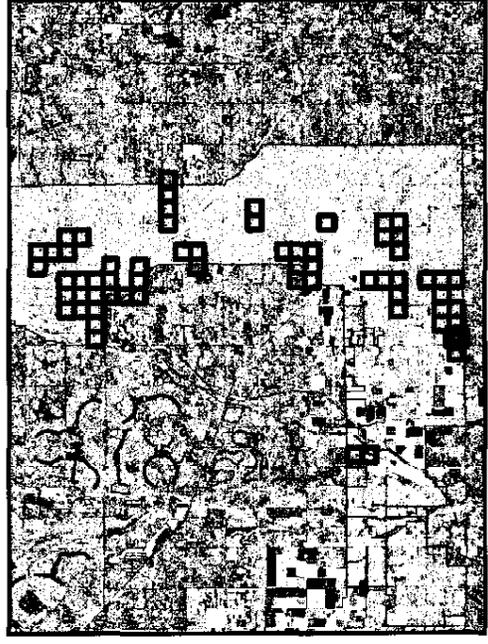
MATCH LINE TO EXHIBIT #61

MATCH LINE TO EXHIBIT #69

Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- Crack_Seal_Areas

VICINITY MAP



Prepared For:



Prepared By:



IMPROVEMENT EXHIBIT

EXHIBIT 61 of 63

MATCH LINE TO EXHIBIT #55



MATCH LINE TO EXHIBIT #60

MATCH LINE TO EXHIBIT #62

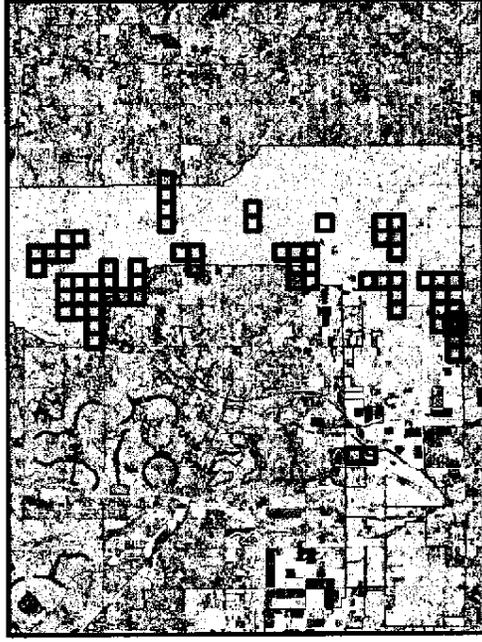
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Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- Crack_Seal_Areas

VICINITY MAP



Prepared For:



Prepared By:

**RITICH-POWER
& Associates**

Civil Engineering and Surveying Consultants

Feet



IMPROVEMENT EXHIBIT

EXHIBIT 62 of 63

MATCH LINE TO EXHIBIT #56



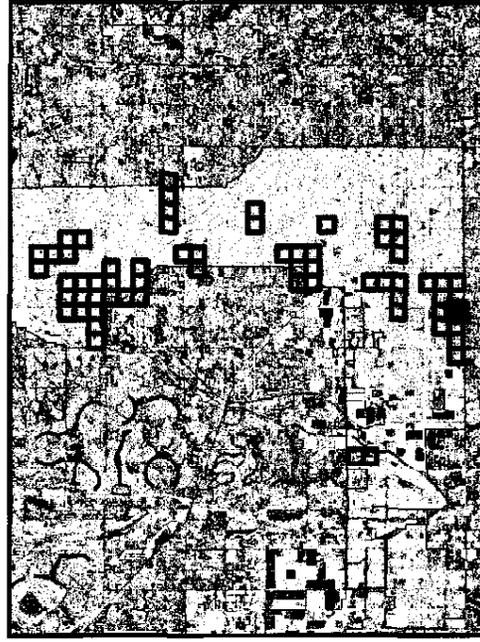
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- 1) ALL ASPHALT REPAIR AREA LOCATIONS SHOWN ARE APPROXIMATE. ACTUAL LOCATIONS ARE AS MARKED IN THE FIELD.
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Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- Crack_Seal_Areas

VICINITY MAP



Prepared For:



Prepared By:

RITICH-POWELL & Associates

Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

EXHIBIT 63 of 63

MATCH LINE TO EXHIBIT #58



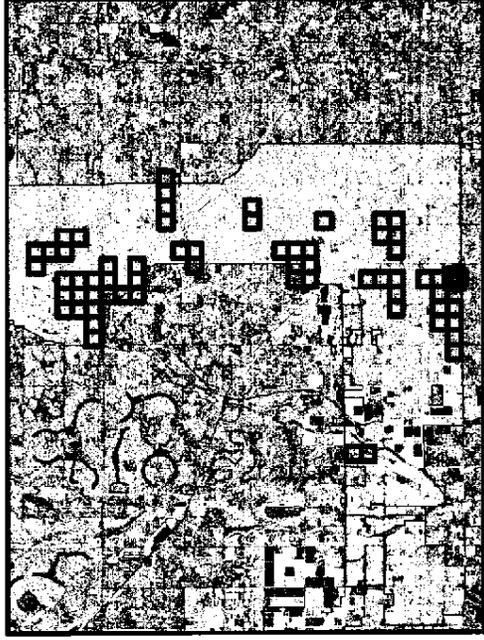
CONSTRUCTION NOTES:

- 1) ALL ASPHALT REPAIR AREA LOCATIONS SHOWN ARE APPROXIMATE. ACTUAL LOCATIONS ARE AS MARKED IN THE FIELD.
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Legend

- Asphalt_Repair_Areas
- Slurry_Seal_Areas
- Crack_Seal_Areas

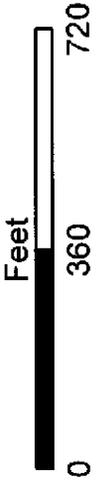
VICINITY MAP



Prepared For: Prepared By:



RITICH-POWERLL & Associates
Civil Engineering and Surveying Consultants





APPENDIX C

MARKING PLANS

PAVEMENT MARKING LEGEND

		4" DOUBLE YELLOW			4" SOLID WHITE
		4" SOLID DOUBLE YELLOW LINE TYPE 'D' RPMS @20' (EACH LINE)			12" SOLID WHITE TYPE 'C' RPMS
		4" BROKEN YELLOW			4" BROKEN WHITE
		6" SOLID YELLOW			6" SOLID WHITE
		4" SOLID BROKEN YELLOW			8" SOLID WHITE
		12" SOLID YELLOW			12" SOLID WHITE
		TURN ARROWS (LEFT/RIGHT/THROUGH/BOTH STRIPING)			
		SPEED CUSHION AND STRIPING PER DETAILS G-350 AND G-351			

NOTE: ALL DIMENSIONS SHOWN ARE MEASURED TO MIDPOINT OF STRIPING AND EDGE OF PAVEMENT.

CITY OF GLENDALE
PROJECT NO. 141513
SLURRY SEAL PHASE 1



DRAWN: [] CHECKED: []
SK/TC: [] RC: []
DATE: JAN 2015
SHEET 2 OF 23

2014/2015 PAVEMENT
MANAGEMENT PROGRAM
SLURRY SEAL PHASE 1
CITY OF GLENDALE

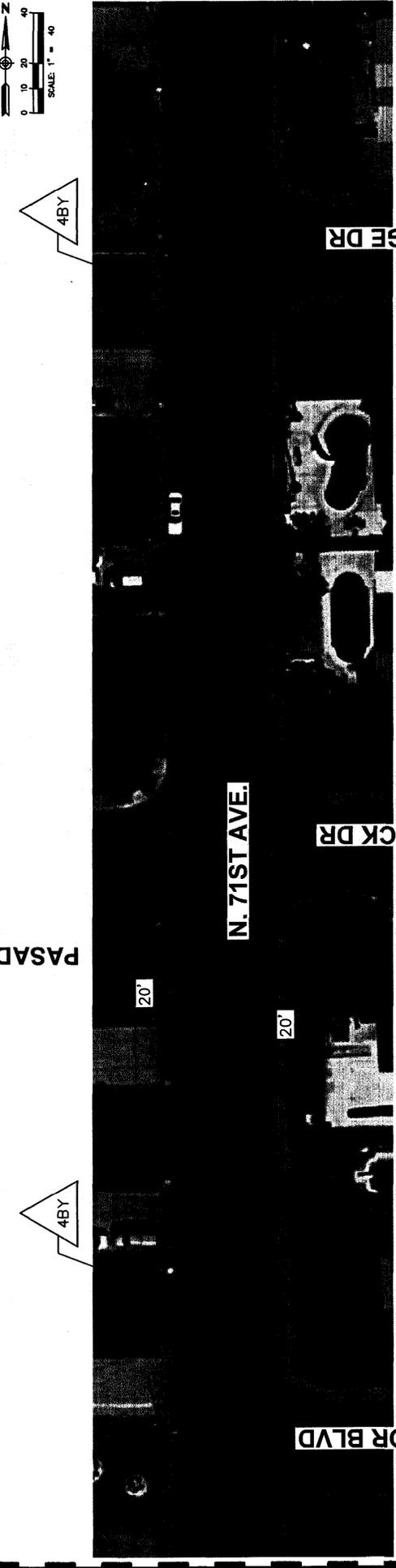
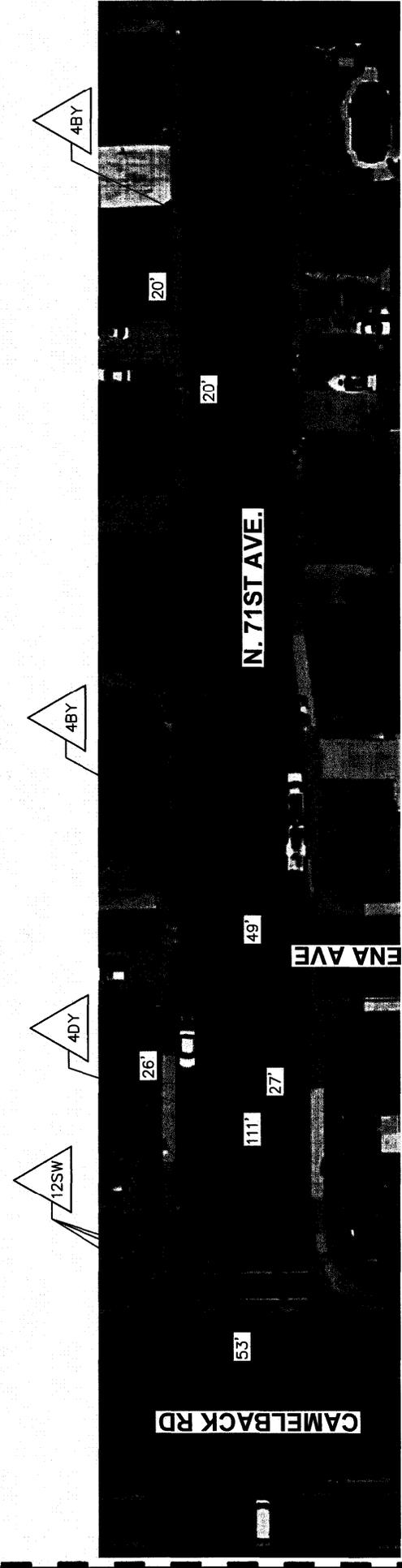


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& Associates
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www.rittochpowell.com

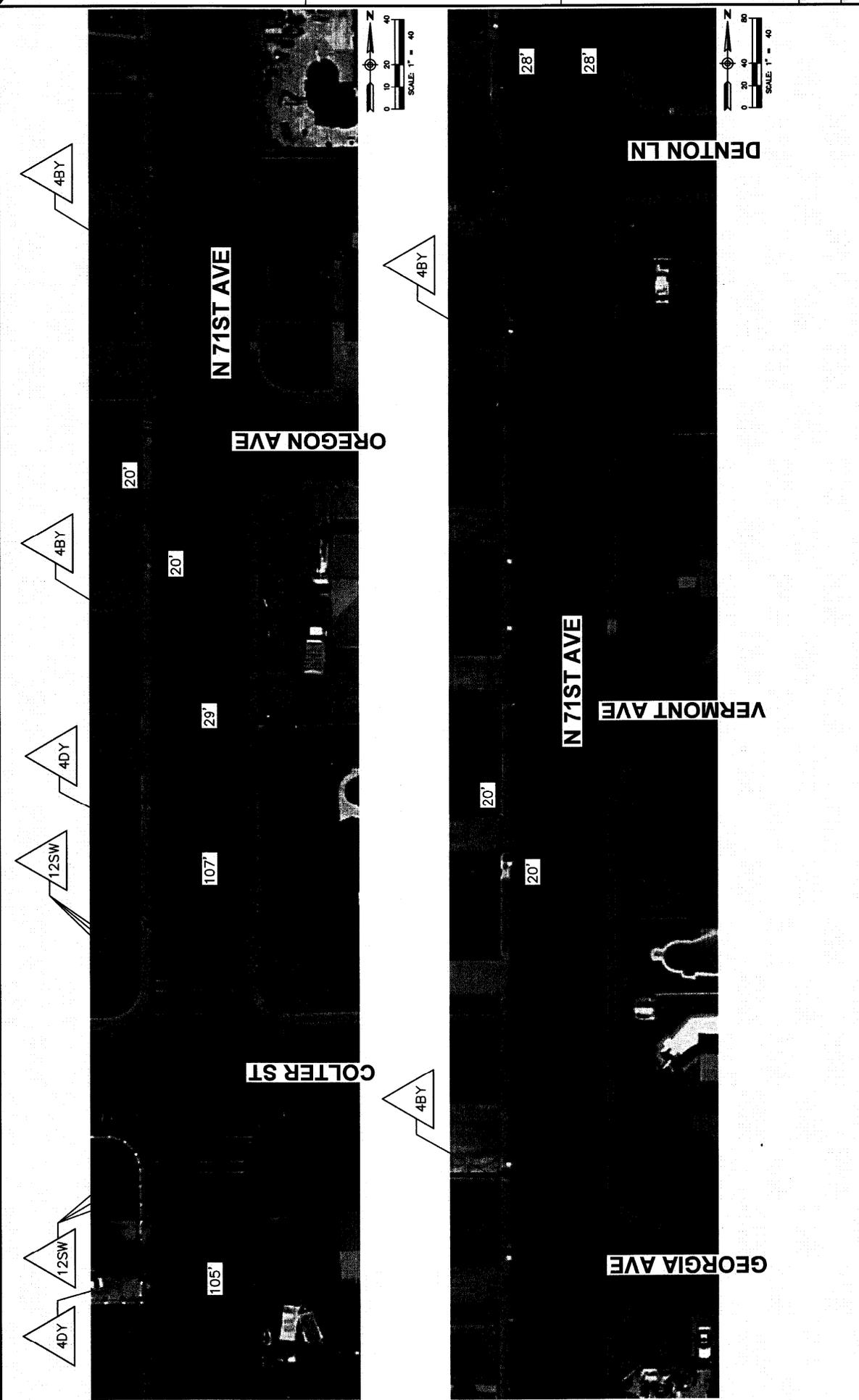
CITY OF GLENDALE
ENGINEERING DEPARTMENT
05850 W. GLENDALE AVE
GLENDALE, ARIZONA 85301 (623) 930-3630



CITY OF GLENDALE
PROJECT NO. 141513
SLURRY SEAL PHASE 1



NOTE:
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CITY OF GLENDALE
ENGINEERING DEPARTMENT
6580 W. GLENDALE AVE
GLENDALE, ARIZONA 85301 (623) 930-3630

RITCOH-POWELL
& Associates
602.263.1177
www.ritchpowell.com



2014/2015 PAVEMENT
MANAGEMENT PROGRAM
N 71ST AVE
CAMELBACK RD - BETHANY HOME RD

ST-02
DRAWING
EXHIBIT 58 & 63
RC
SK/TCB
DATE
JAN 2015
SHEET 4
OF 23

CITY OF GLENDALE
PROJECT NO. 141513
SLURRY SEAL PHASE 1



NOTE:
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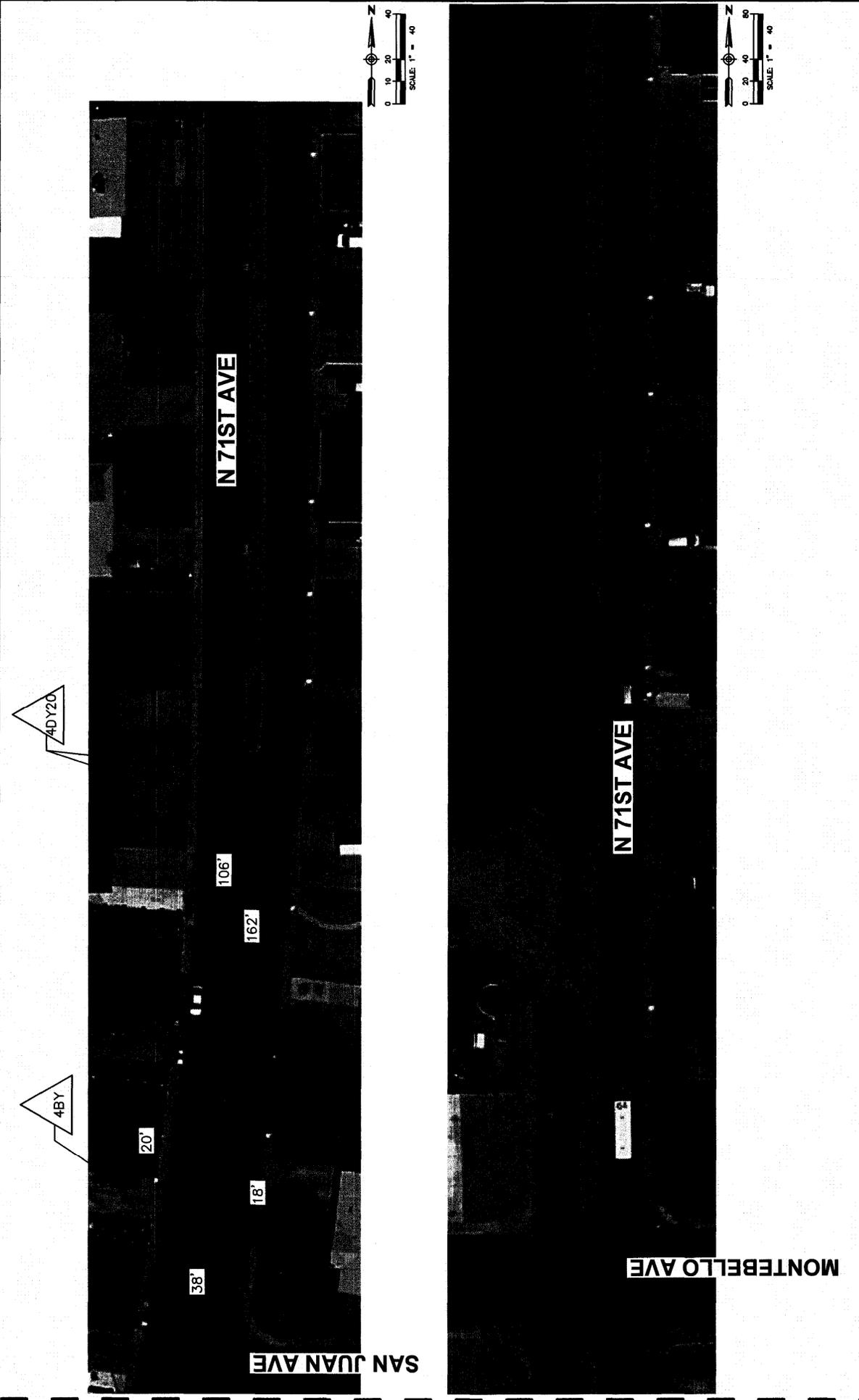
CITY OF GLENDALE
PROJECT NO. 141513
SLURRY SEAL PHASE 1

92-263-4100
PHOTO SOURCE: GOOGLE EARTH
NO DATE, LOCATION, OR SCALE



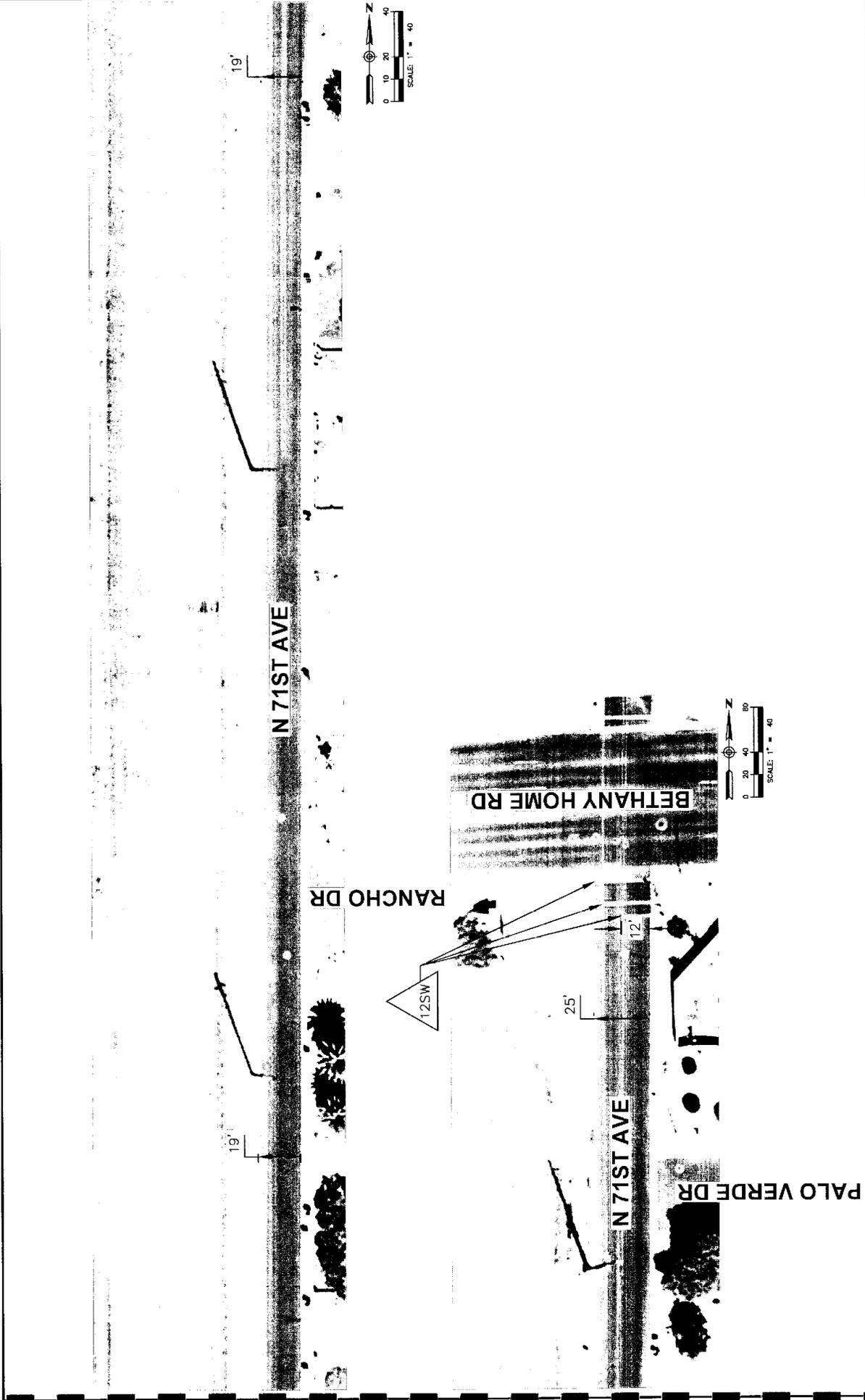
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CITY OF GLENDALE
 PROJECT NO. 141513
 SLURRY SEAL PHASE 1



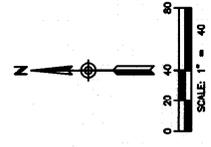
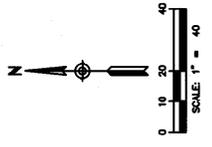
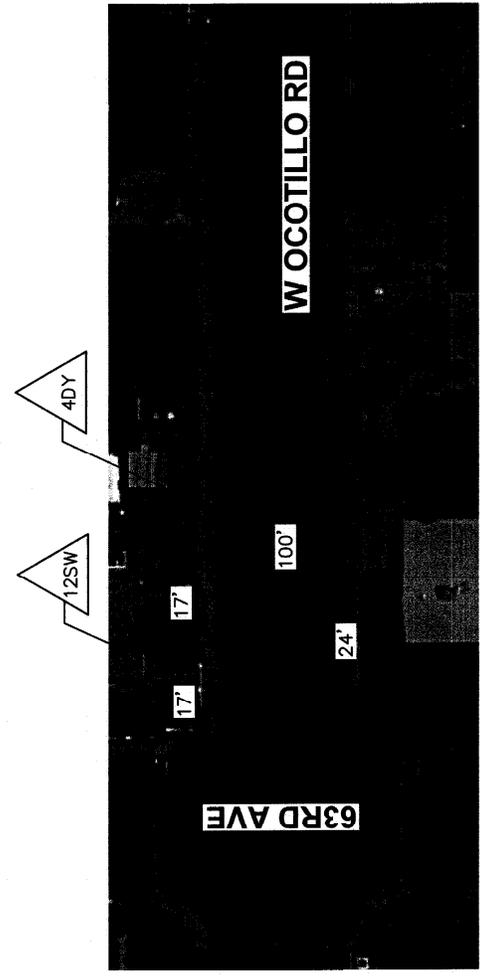
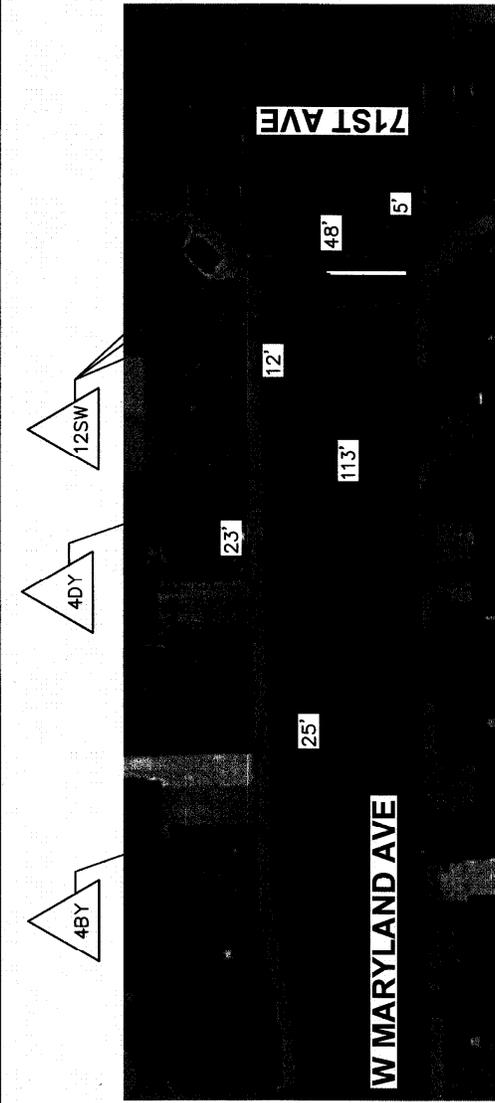
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CITY OF GLENDALE
PROJECT NO. 141513
SLURRY SEAL PHASE 1



NOTE:
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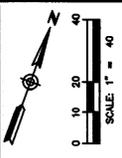
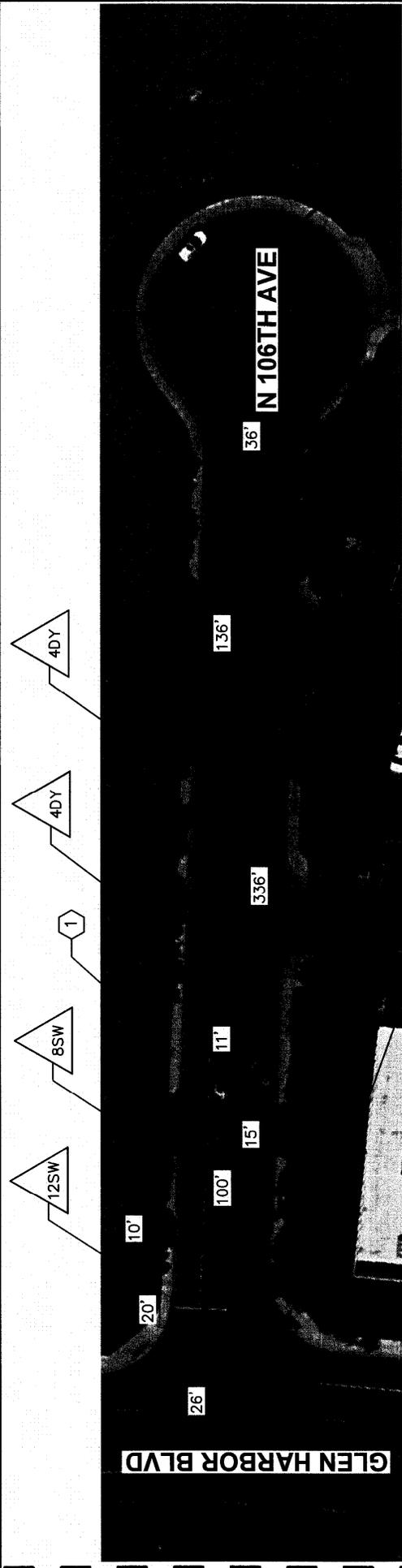
CITY OF GLENDALE
 PROJECT NO. 141513
 SLURRY SEAL PHASE 1



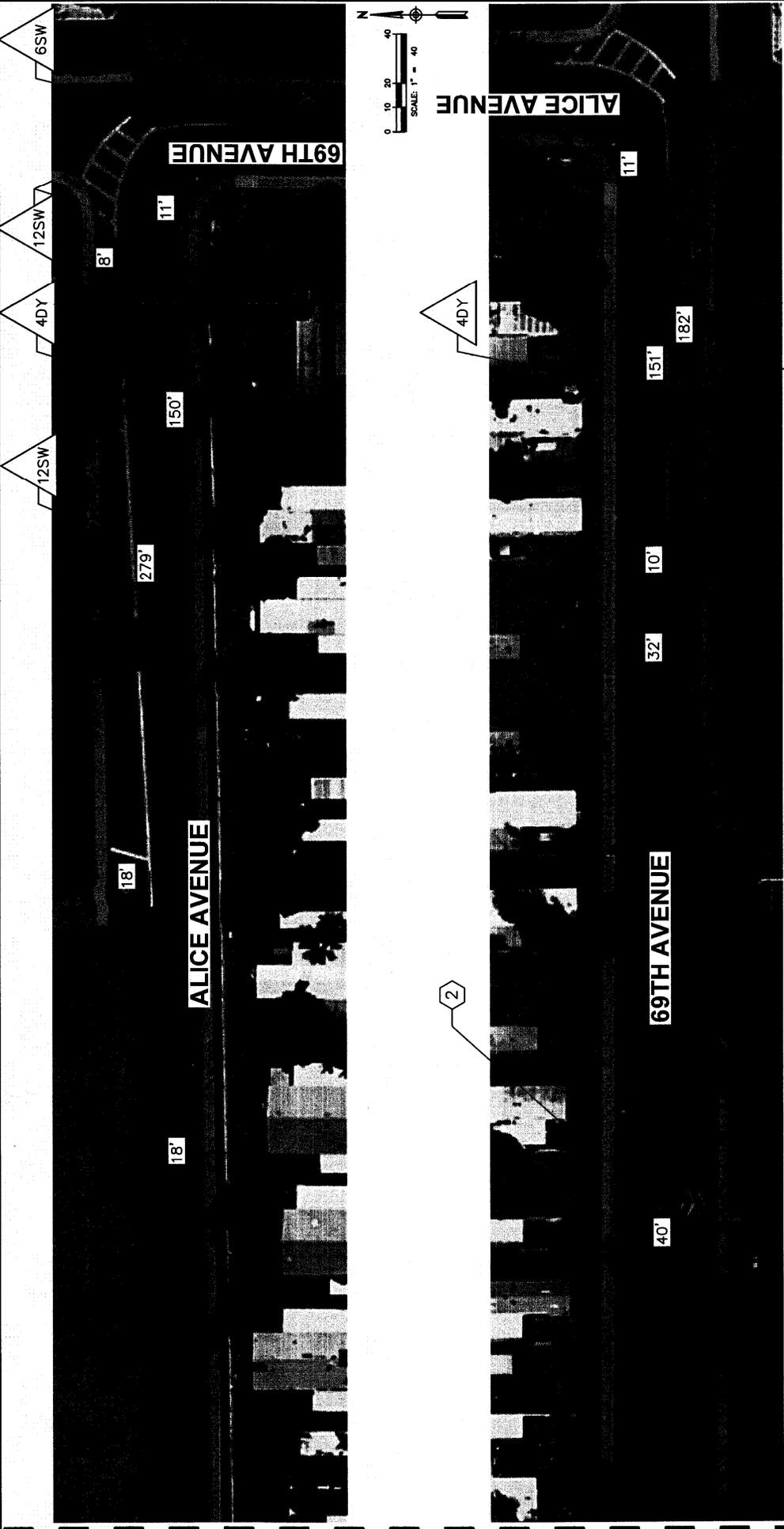
NOTE:
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CITY OF GLENDALE
 PROJECT NO. 141513
 SLURRY SEAL PHASE 1



NOTE:
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NOTE: ALL STRIPING TO INCLUDE RPMS, RPMS TO BE FIELD LOCATED BY CITY STAFF. QUANTITIES HAVE BEEN INCLUDED IN BID ITEM FOR RAISED PAVEMENT MARKERS.

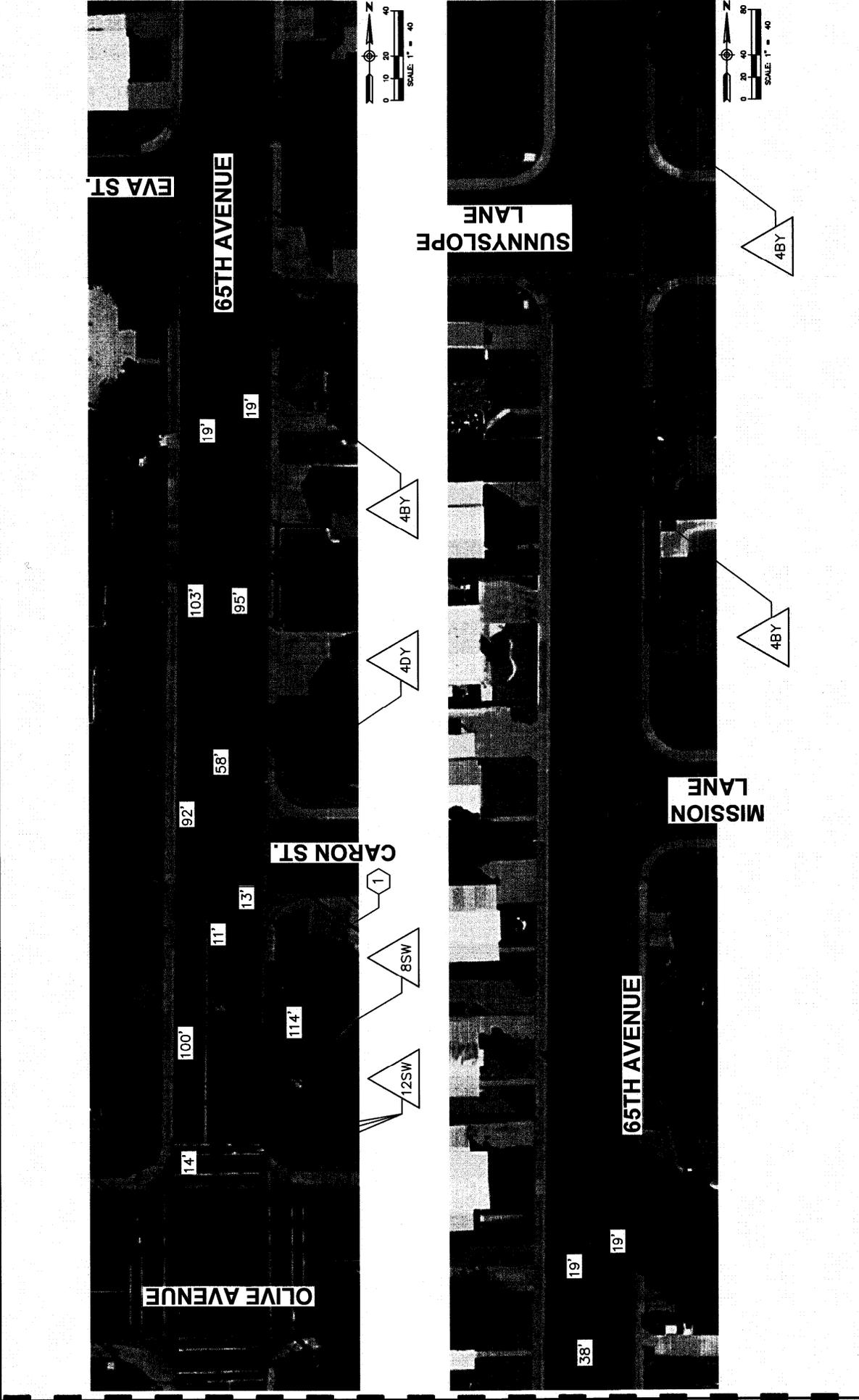
CITY OF GLENDALE
 PROJECT NO. 141513
 SLURRY SEAL PHASE 1



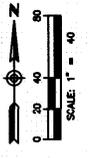
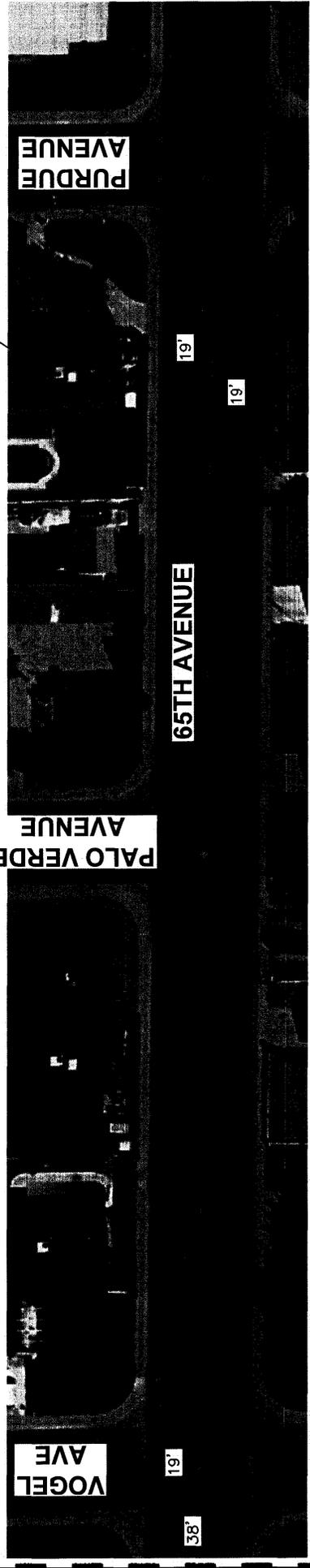
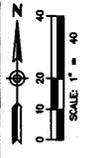
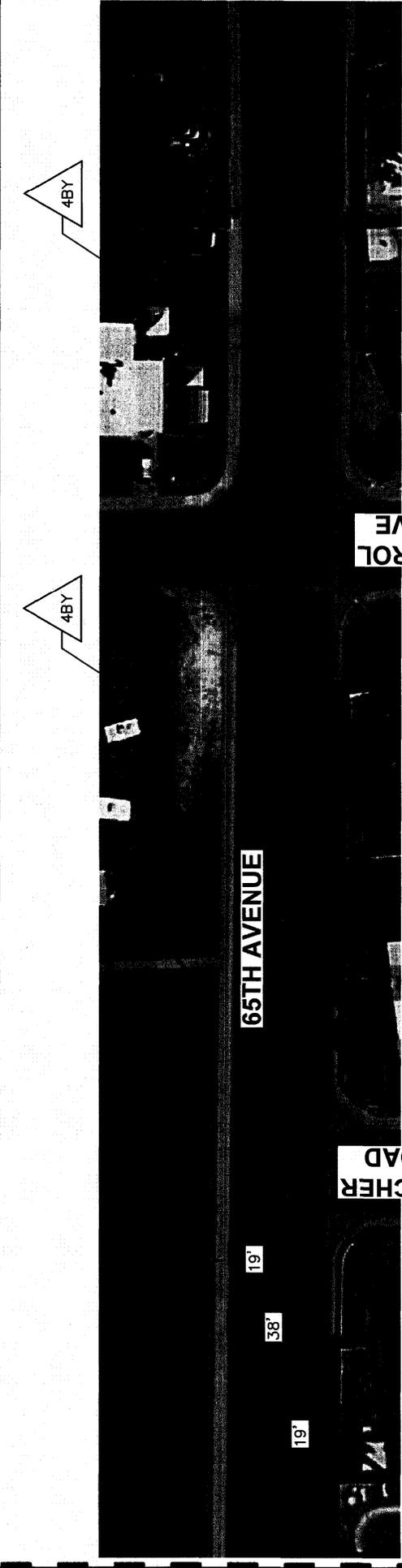
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CITY OF GLENDALE
PROJECT NO. 141513
SLURRY SEAL PHASE 1



NOTE:
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 GLENDALE, ARIZONA 85301 (623) 830-3630

RITTOCH-POWELL & Associates
 602.263.1177
 www.rittochpowell.com



2014/2015 PAVEMENT
MANAGEMENT PROGRAM
 65TH AVENUE
 OLIVE AVE TO MOUNTAIN VIEW RD

DRAWING
ST-11

MAP
 Exhibit 34

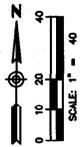
DESIGNED BY
 SK/TB

CHECKED BY
 RC

DATE
 JAN 2015

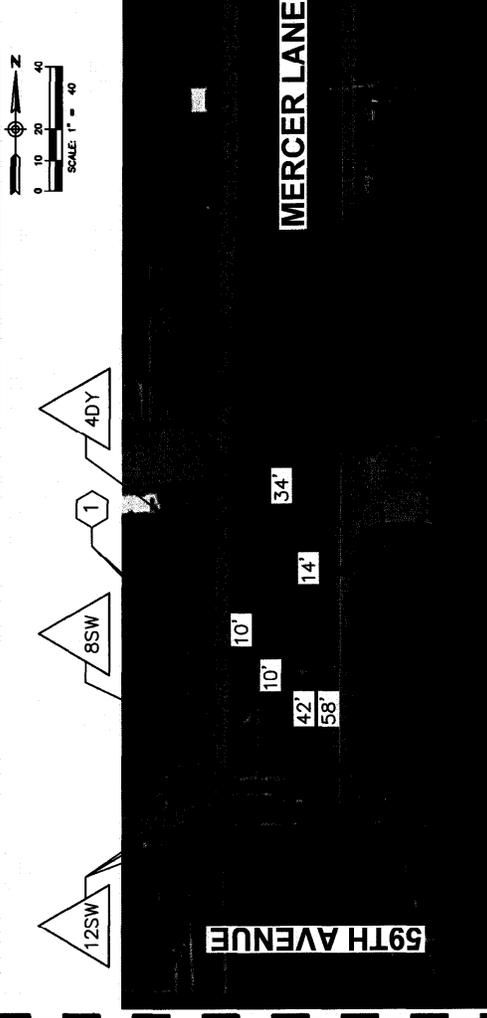
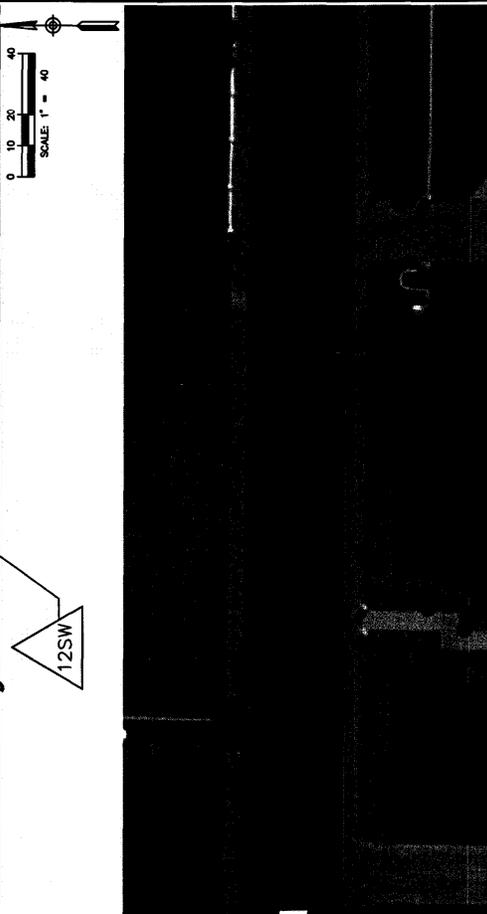
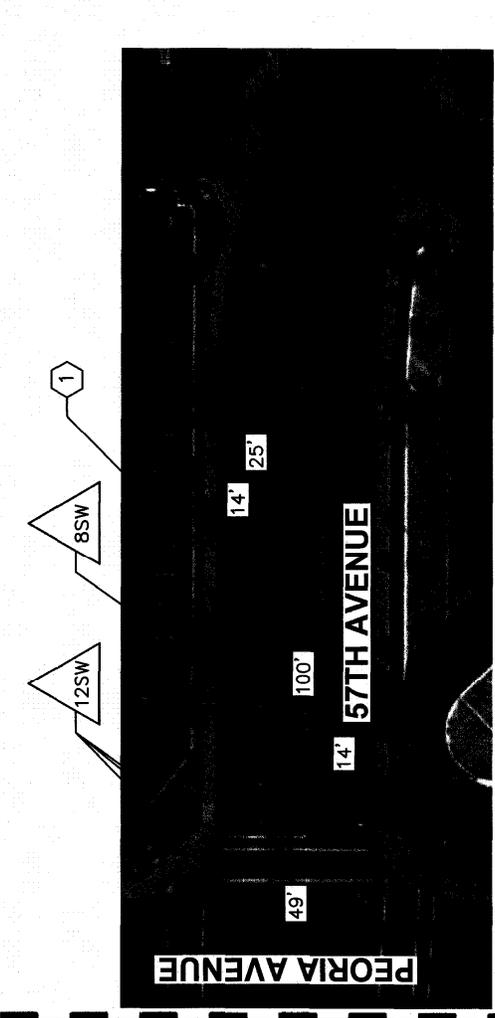
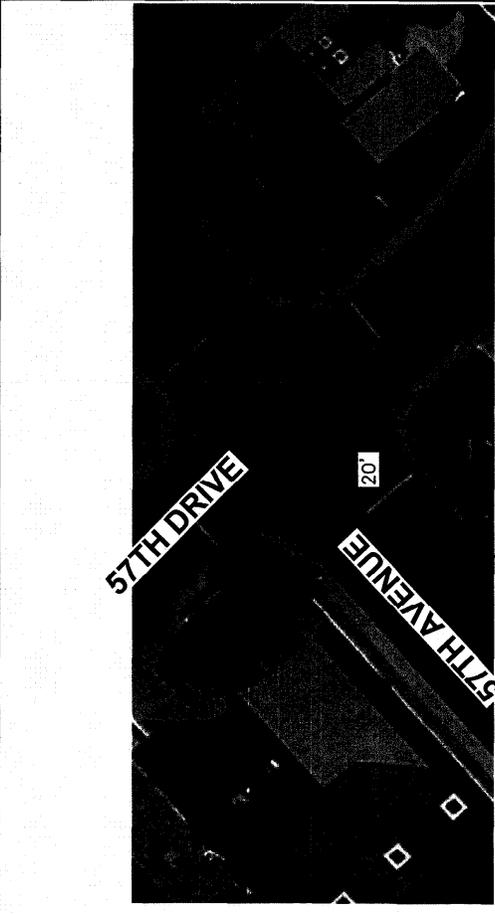
SHEET 13
 OF 23

CITY OF GLENDALE
PROJECT NO. 141513
SLURRY SEAL PHASE 1

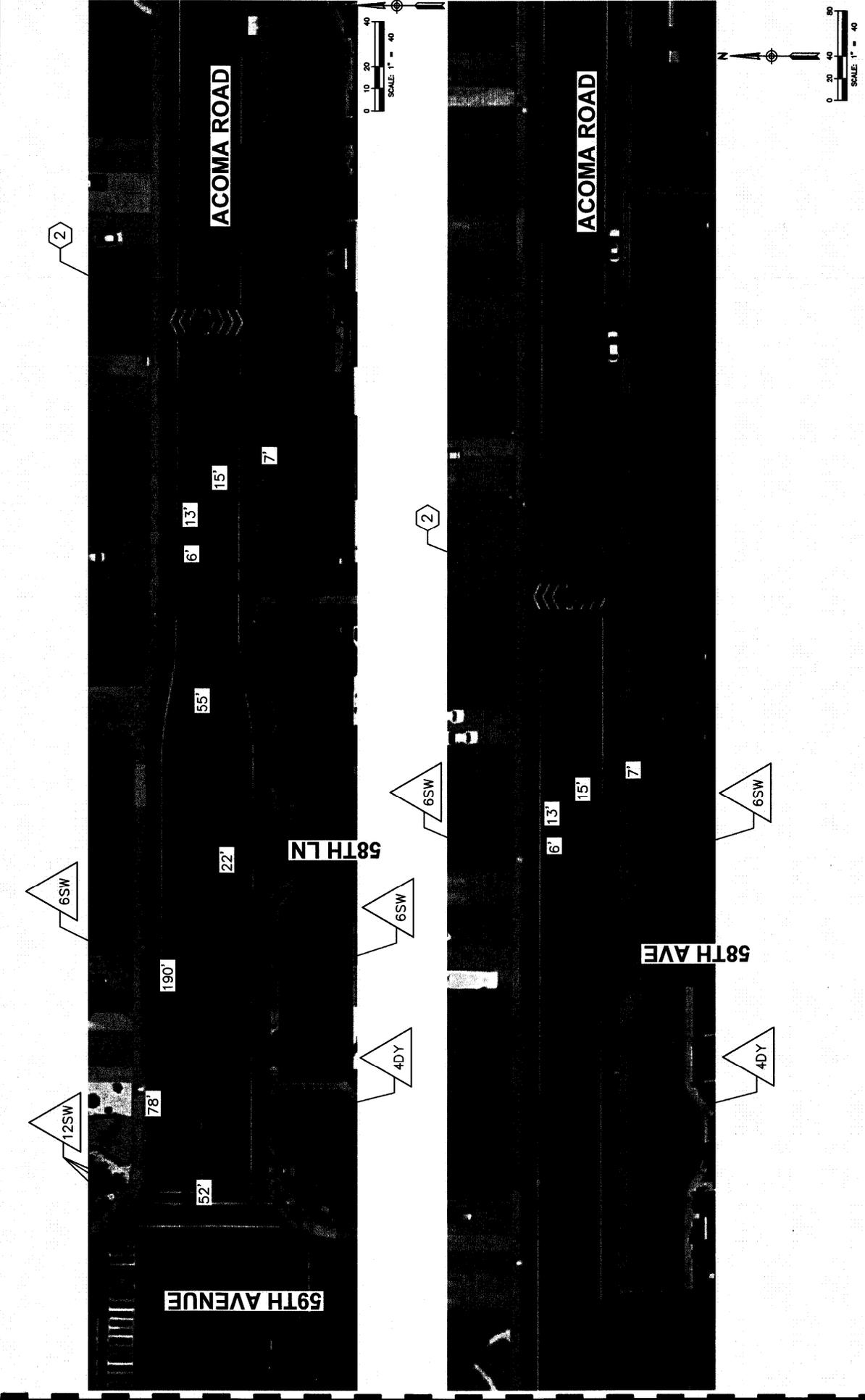


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CITY OF GLENDALE
PROJECT NO. 141513
SLURRY SEAL PHASE 1



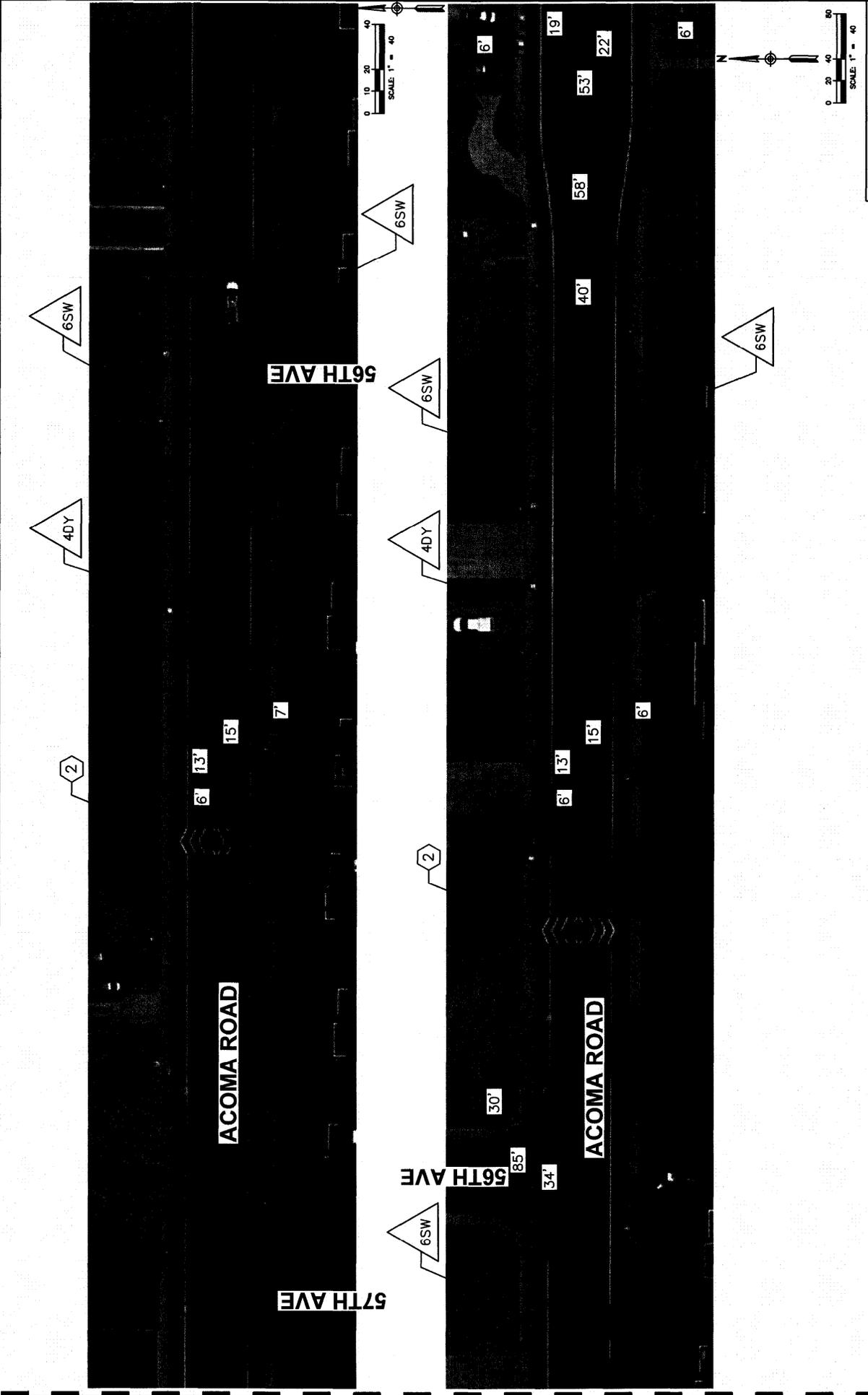
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CITY OF GLENDALE
 PROJECT NO. 141513
 SLURRY SEAL PHASE 1



NOTE:
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CITY OF GLENDALE
 PROJECT NO. 141513
 SLURRY SEAL PHASE 1

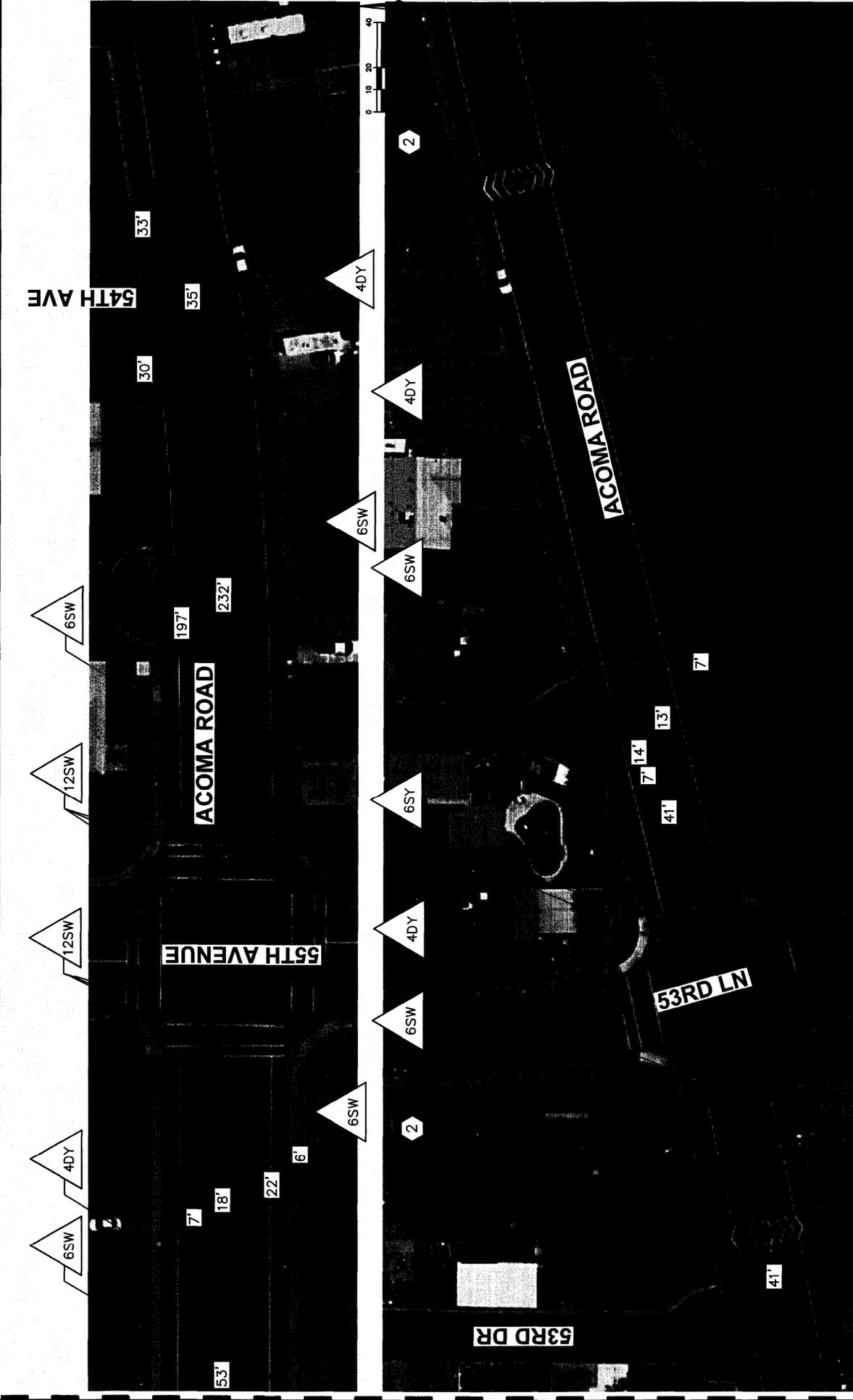


NOTE:
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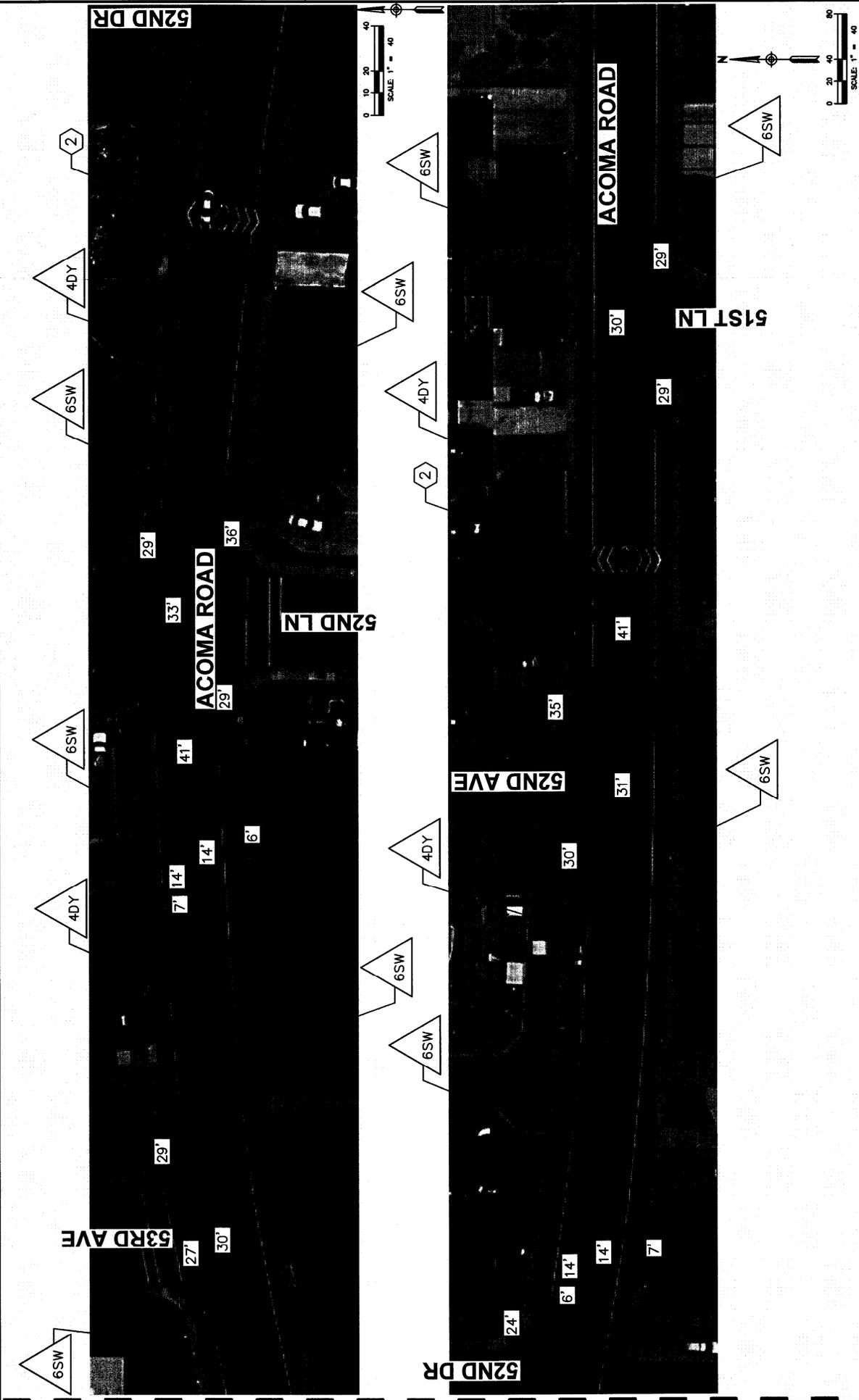
CITY OF GLENDALE
PROJECT NO. 141513
SLURRY SEAL PHASE 1



NOTE: INSTALL 24" DIAMETER YELLOW
CIRCLES @ SCHOOLS 15 MPH
PORTABLE SIGN LOCATIONS, TO BE
FIELD LOCATED BY CITY STAFF.



NOTE:
ALL DIMENSIONS SHOWN ARE MEASURED TO MIDPOINT OF STRIPING AND EDGE OF PAVEMENT.

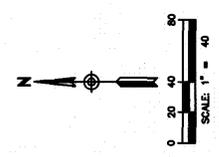


CITY OF GLENDALE
 PROJECT NO. 141513
 SLURRY SEAL PHASE 1

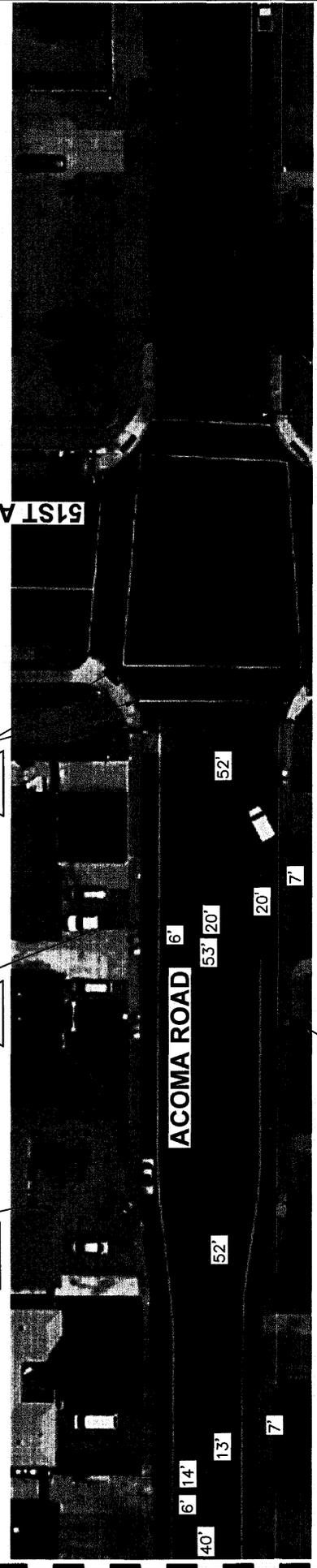
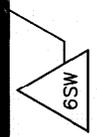
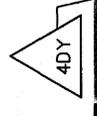
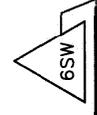


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CITY OF GLENDALE
 PROJECT NO. 141513
 SLURRY SEAL PHASE 1

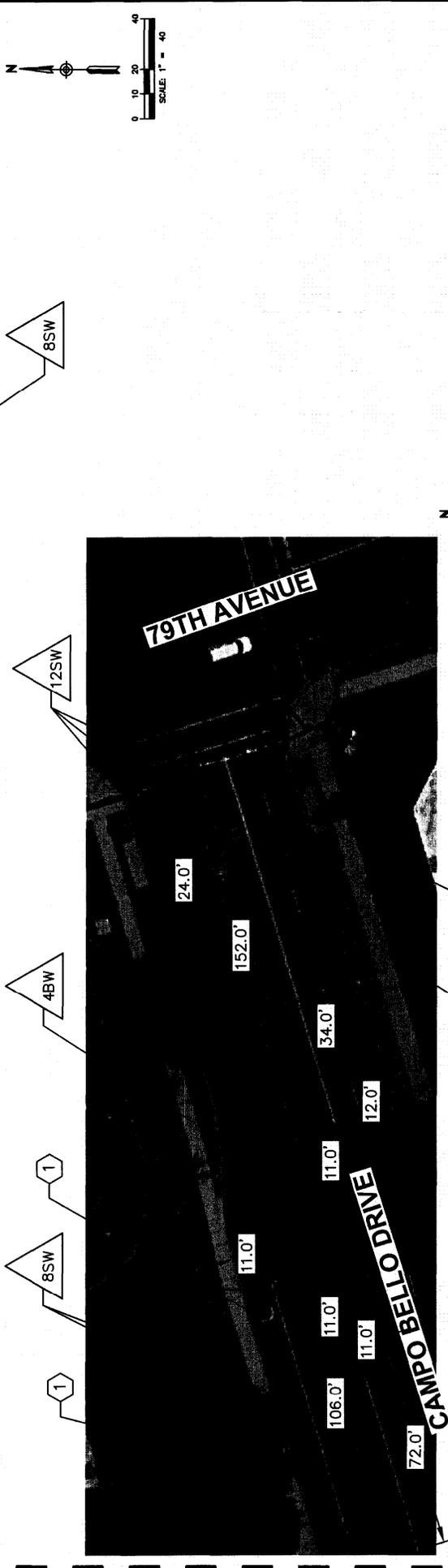
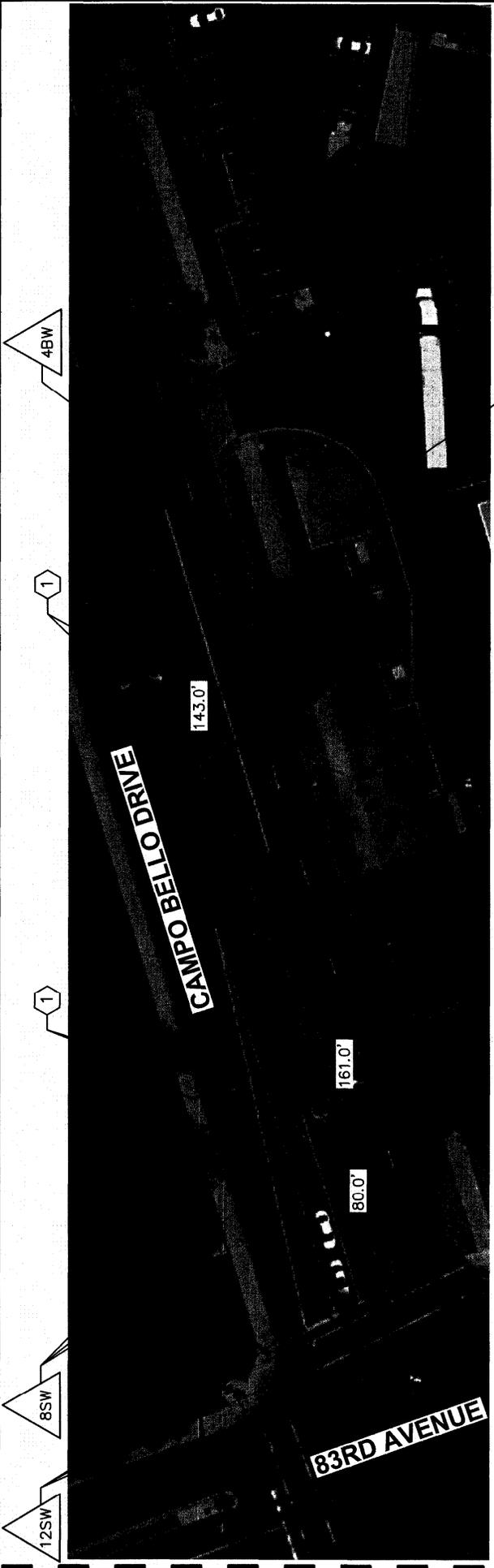


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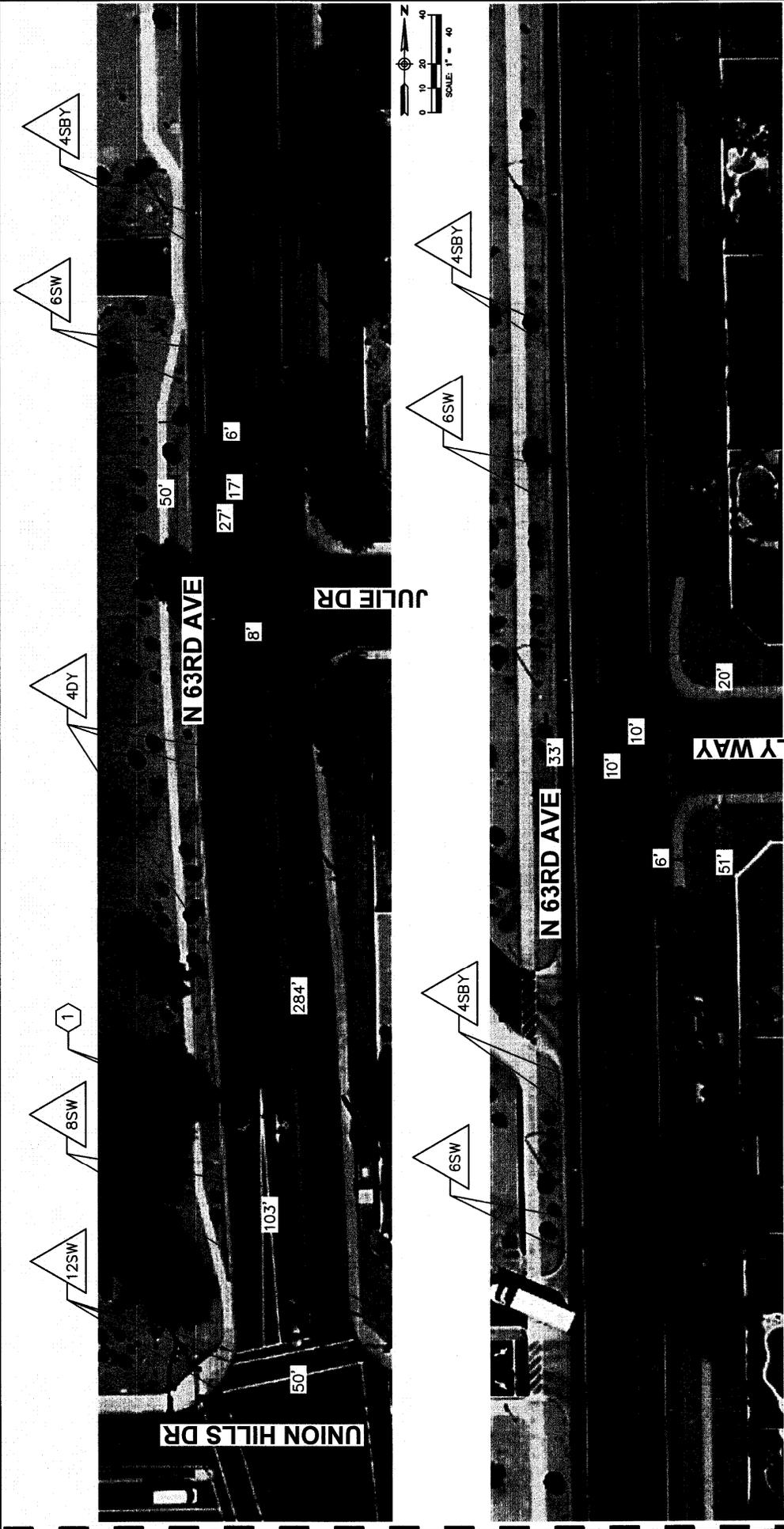


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CITY OF GLENDALE
 PROJECT NO. 141513
 SLURRY SEAL PHASE 1



NOTE:
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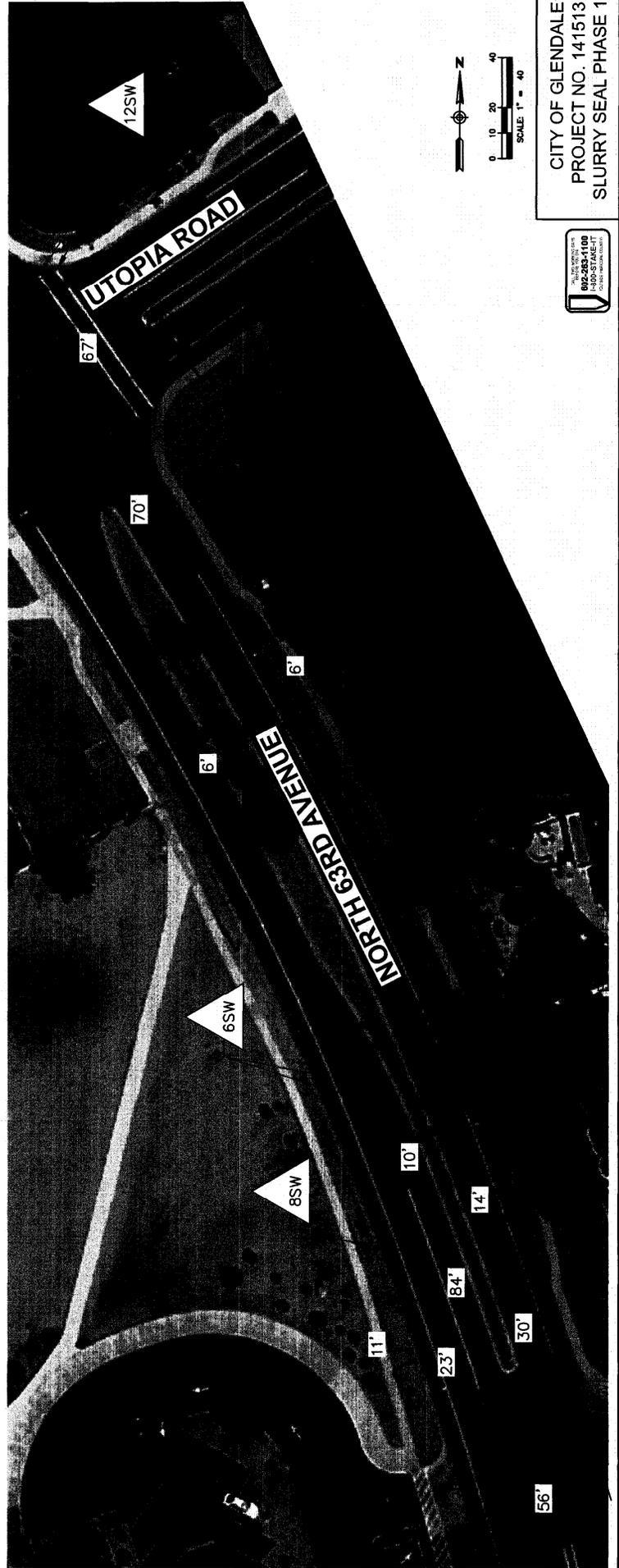


NOTE: INSTALL 24" DIAMETER YELLOW THERMOPLASTIC CIRCLES @ SCHOOLS 15 MPH PORTABLE SIGN LOCATIONS TO BE FIELD LOCATED BY CITY STAFF.

NOTE: ALL DIMENSIONS SHOWN ARE MEASURED TO MIDPOINT OF STRIPING AND EDGE OF PAVEMENT.

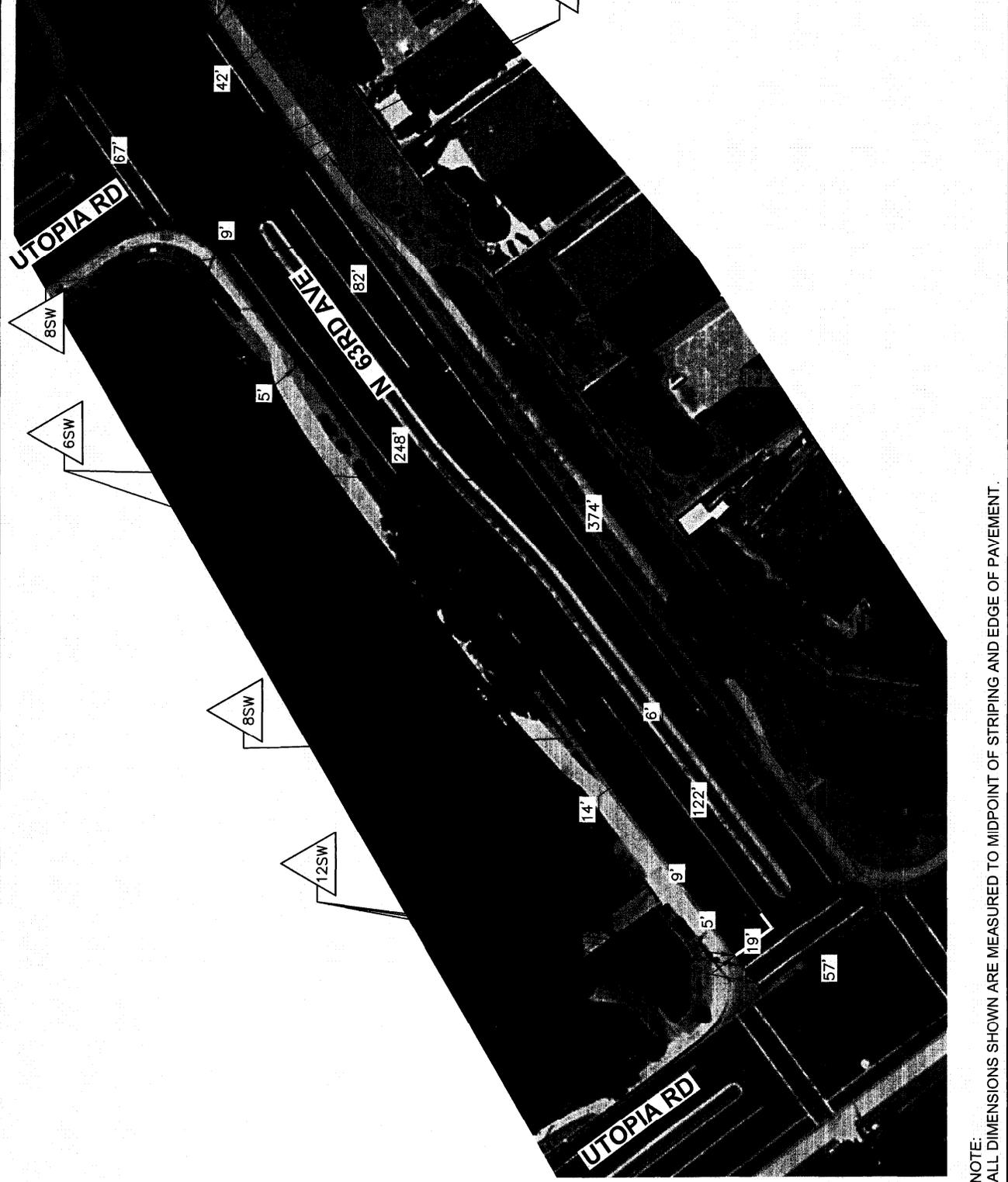


NOTE: INSTALL 24" DIAMETER YELLOW
 THERMOPLASTIC CIRCLES @ SCHOOLS
 15 MPH PORTABLE SIGN LOCATIONS,
 TO BE FIELD LOCATED BY CITY STAFF.



CITY OF GLENDALE
 PROJECT NO. 141513
 SLURRY SEAL PHASE 1





NOTE:
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APPENDIX D

**SLURRY SEAL
IMPROVEMENT INDEX**

SLURRY SEAL INDEX

TREATMENT	RD_NAME	RD_FROM	RD_TO	RD_LENGTH	PVMT_WIDTH	PVMT_AREA (SF)
SLURRY_SEAL	N 106TH AVE	CUL-DE-SAC	N GLEN HARBOR BLVD	453	36	16,321
SLURRY_SEAL	N 55TH DR	W CHRISTY DR	CUL-DE-SAC	304	32	9,714
SLURRY_SEAL	N 55TH DR	W BECKER LN	W CHRISTY DR	504	32	16,141
SLURRY_SEAL	N 56TH AVE	W PEORIA AVE	W SAGUARO DR	479	32	15,317
SLURRY_SEAL	N 57TH AVE	W NAVAJO DR	N 58TH DR	618	32	19,786
SLURRY_SEAL	N 57TH AVE	W MERCER LN	W DESERT COVE AVE	286	40	11,431
SLURRY_SEAL	N 57TH AVE	W PEORIA AVE	W SAGUARO DR	690	40	27,593
SLURRY_SEAL	N 57TH AVE	W CHRISTY DR	W MERCER LN	254	40	10,170
SLURRY_SEAL	N 57TH AVE	W SAGUARO DR	W CHRISTY DR	248	40	9,920
SLURRY_SEAL	N 57TH DR	W ROYAL PALM RD	W NAVAJO DR	153	32	5,508
SLURRY_SEAL	N 57TH DR	W LAURIE LN	W EVERGREEN RD	285	32	9,104
SLURRY_SEAL	N 57TH DR	CUL-DE-SAC	N 57TH AVE	346	32	11,077
SLURRY_SEAL	N 58TH AVE	W NAVAJO DR	N 57TH DR	654	32	20,917
SLURRY_SEAL	N 58TH DR	W LAURIE LN	W EVERGREEN RD	692	32	22,150
SLURRY_SEAL	N 58TH DR	W NAVAJO DR	W LAURIE LN	255	32	8,168
SLURRY_SEAL	N 61ST AVE	W OCOTILLO RD	W LAWRENCE RD	340	33	11,204
SLURRY_SEAL	N 61ST AVE	W MICHELLE DR	W MICHIGAN AVE	510	41	20,910
SLURRY_SEAL	N 61ST AVE	W GROVERS AVE	W MICHELLE DR	666	41	27,310
SLURRY_SEAL	N 63RD AVE	W UNION HILLS DR	W UTOPIA RD	2,648	46	121,793
SLURRY_SEAL	N 64TH LN	W ORAIBI DR	W TONTO DR	270	32	8,633
SLURRY_SEAL	N 64TH LN	W TONTO DR	W BEHREND DR	270	32	8,640
SLURRY_SEAL	N 64TH LN	W BEHREND DR	W MATILDA LN	270	32	8,640
SLURRY_SEAL	N 65TH AVE	W PIUTE AVE	A ORAIBI DR	344	32	11,012
SLURRY_SEAL	N 65TH AVE	W MATILDA LN	W ADOBE DR	270	32	8,637
SLURRY_SEAL	N 65TH AVE	W OLIVE AVE	W HATCHER RD	1,336	39	52,088
SLURRY_SEAL	N 65TH AVE	W HATCHER RD	W MOUNTAIN VIEW RD	1,306	39	50,938
SLURRY_SEAL	N 65TH DR	CUL-DE-SAC	W ORAIBI DR	100	32	3,192
SLURRY_SEAL	N 65TH DR	W LAWRENCE LN	W GOLDEN LN	404	33	13,340
SLURRY_SEAL	N 65TH DR	W TOWNLEY AVE	W PUGET AVE	275	33	9,077
SLURRY_SEAL	N 65TH DR	W SWEETWATER AVE	W SURREY AVE	531	28	14,876
SLURRY_SEAL	N 65TH DR	W SURREY AVE	W PERSHING AVE	518	28	14,498
SLURRY_SEAL	N 65TH DR	W PERSHING AVE	W WILLOW AVE	455	28	12,737
SLURRY_SEAL	N 65TH DR	N WILLOW AVE	CUL-DE-SAC	154	32	4,941

SLURRY SEAL INDEX

SLURRY_SEAL	N 65TH LN	W ORAIBI DR	W TONTO DR	270	32	8,638
SLURRY_SEAL	N 65TH LN	W PIUTE AVE	CUL-DE-SAC	131	32	4,205
SLURRY_SEAL	N 66TH AVE	W TONTO DR	W BEHREND DR	247	32	7,896
SLURRY_SEAL	N 66TH AVE	W UTOPIA RD	W PIUTE AVE	196	32	6,257
SLURRY_SEAL	N 66TH AVE	W BEHREND DR	W MATILDA LN	270	32	8,640
SLURRY_SEAL	N 66TH AVE	W LAWRENCE LN	W GOLDEN LN	433	33	14,289
SLURRY_SEAL	N 66TH AVE	W GOLDEN LN	W TOWNLEY AVE	251	33	8,277
SLURRY_SEAL	N 66TH DR	W TONTO DR	CUL-DE-SAC	161	32	5,152
SLURRY_SEAL	N 66TH DR	W LAWRENCE LN	W DELMONICO LN	155	33	5,125
SLURRY_SEAL	N 66TH DR	W ALICE AVE	W LAWRENCE LN	161	33	5,323
SLURRY_SEAL	N 66TH DR	W TOWNLEY AVE	W PUGET AVE	245	33	8,087
SLURRY_SEAL	N 66TH LN	W ORAIBI DR	W TONTO DR	294	32	9,416
SLURRY_SEAL	N 66TH LN	N 66TH AVE	W ORAIBI DR	760	32	24,311
SLURRY_SEAL	N 66TH LN	W GOLDEN LN	W TOWNLEY AVE	276	33	9,094
SLURRY_SEAL	N 67TH DR	W GOLDEN LN	CUL-DE-SAC	141	32	4,520
SLURRY_SEAL	N 67TH LN	W GOLDEN LN	W PUGET AVE	451	32	14,443
SLURRY_SEAL	N 68TH DR	W LAWRENCE LN	W GOLDEN LN	530	32	16,952
SLURRY_SEAL	N 68TH DR	W GOLDEN LN	W TOWNLEY AVE	175	32	5,584
SLURRY_SEAL	N 68TH DR	W PUGET AVE	W OLIVE AVE	199	32	6,370
SLURRY_SEAL	N 68TH LN	W LAWRENCE LN	W GOLDEN LN	435	32	13,928
SLURRY_SEAL	N 68TH LN	W TOWNLEY AVE	W PUGET AVE	271	32	8,664
SLURRY_SEAL	N 69TH AVE	W DIANA AVE	W RUTH AVE	279	40	11,168
SLURRY_SEAL	N 69TH AVE	W RUTH AVE	W ALICE AVE	354	20	7,076
SLURRY_SEAL	N 69TH DR	W LAWRENCE LN	W GOLDEN LN	401	32	12,840
SLURRY_SEAL	N 69TH DR	W GOLDEN LN	W TOWNLEY AVE	321	32	10,256
SLURRY_SEAL	N 69TH DR	W PALMAIRE AVE	W MIDWAY AVE	280	33	9,108
SLURRY_SEAL	N 69TH DR	W GLENN DR	W PALMAIRE AVE	280	33	9,108
SLURRY_SEAL	N 69TH DR	W CACTUS WREN DR	W GLENN DR	275	33	8,930
SLURRY_SEAL	N 70TH AVE	W MIDWAY AVE	W MYRTLE AVE	170	33	5,519
SLURRY_SEAL	N 70TH AVE	W GLENN DR	W PALMAIRE AVE	280	33	9,111
SLURRY_SEAL	N 70TH AVE	W GLENDALE AVE	W CACTUS WREN DR	297	33	9,655
SLURRY_SEAL	N 70TH DR	W GLENN DR	W PALMAIRE AVE	281	33	9,119
SLURRY_SEAL	N 70TH LN	W CACTUS WREN DR	W GLENN DR	275	33	8,930
SLURRY_SEAL	N 70TH LN	W PALMAIRE AVE	W MIDWAY AVE	290	33	9,425

SLURRY SEAL INDEX

SLURRY_SEAL	N 71ST AVE	W GREENWAY RD	W NANCY RD	481	44	21,169
SLURRY_SEAL	N 71ST AVE	W RANCHO DR	W BETHANY HOME RD	664	19	12,621
SLURRY_SEAL	N 71ST AVE	W MONTEBELLO AVE	W RANCHO DR	786	19	14,934
SLURRY_SEAL	N 71ST AVE	W MISSOURI AVE	W MONTEBELLO AVE	1,204	40	48,146
SLURRY_SEAL	N 71ST AVE	W COLTER ST	W MISSOURI AVE	1,318	40	52,701
SLURRY_SEAL	N 71ST AVE	W MEDLOCK DR	W COLTER ST	481	40	19,251
SLURRY_SEAL	N 71ST AVE	W CAMELBACK RD	W MEDLOCK DR	834	40	33,341
SLURRY_SEAL	N 71ST DR	W ANGELA DR	W GROVERS AVE	423	28	11,838
SLURRY_SEAL	N 71ST DR	W BLUEFIELD AVE	W VILLA THERESA DR	513	28	14,350
SLURRY_SEAL	N 71ST DR	W LIBBY ST	W JOHN CABOT RD	399	28	11,179
SLURRY_SEAL	N 71ST DR	W JOHN CABOT RD	W VILLA RITA DR	371	28	10,388
SLURRY_SEAL	N 73RD AVE	W SANDRA TER	W GRANDVIEW RD	585	37	21,628
SLURRY_SEAL	N 73RD AVE	W SHERRI JEAN LN	W SANDRA TER	1,158	37	42,849
SLURRY_SEAL	N 73RD AVE	W GROVERS AVE	W GROVERS AVE	364	28	1,078
SLURRY_SEAL	N 73RD AVE	W LIBBY ST	W GROVERS AVE	358	28	10,024
SLURRY_SEAL	N 73RD AVE	W JOHN CABOT RD	W BLUEFIELD AVE	867	28	24,269
SLURRY_SEAL	N 73RD AVE	W ANGELA DR	W SAINT JOHN RD	692	28	19,369
SLURRY_SEAL	N 73RD AVE	W UNION HILLS DR	W BLUEFIELD AVE	1,017	28	28,470
SLURRY_SEAL	N 73RD AVE	W LIBBY ST	W JOHN CABOT RD	346	28	9,674
SLURRY_SEAL	N 73RD DR	W LUKE AVE	W SAN JUAN AVE	254	32	483
SLURRY_SEAL	N 73RD DR	W MISSOURI AVE	W LUKE AVE	271	32	8,680
SLURRY_SEAL	N 73RD LN	CUL-DE-SAC	W LUKE AVE	81	32	2,601
SLURRY_SEAL	N 74TH AVE	W LUKE AVE	W SAN JUAN AVE	254	32	8,114
SLURRY_SEAL	N 74TH DR	W LUKE AVE	CUL-DE-SAC	138	32	4,416
SLURRY_SEAL	N 74TH DR	W ANGELA DR	W SAINT JOHN RD	520	28	14,553
SLURRY_SEAL	N 74TH DR	W BLUEFIELD AVE	W VILLA THERESA DR	513	28	14,357
SLURRY_SEAL	N 74TH DR	W LIBBY ST	W VILLA RITA DR	518	28	14,511
SLURRY_SEAL	N 74TH LN	CUL-DE-SAC	W LUKE AVE	80	32	2,559
SLURRY_SEAL	N 75TH AVE E FRONTAGE	W CARO RD	W UNION HILLS DR	533	18	9,332
SLURRY_SEAL	N 75TH AVE E FRONTAGE	W JOHN CABOT RD	W CARO RD	1,027	18	17,973
SLURRY_SEAL	N 75TH AVE E FRONTAGE	W GROVERS AVE	W JOHN CABOT RD	731	18	12,789
SLURRY_SEAL	N 75TH DR	W DENTON LN	W MISSOURI AVE	173	32	5,537
SLURRY_SEAL	N 75TH LN	W GEORGIA AVE	W VERMONT AVE	271	32	8,672
SLURRY_SEAL	N 75TH LN	N 77TH LN	W COLTER ST	279	32	8,919

SLURRY SEAL INDEX

SLURRY_SEAL	N 76TH AVE	W OREGON AVE	W GEORGIA AVE	271	32	316
SLURRY_SEAL	N 76TH LN	W VERMONT AVE	W DENTON LN	270	32	8,624
SLURRY_SEAL	N 76TH LN	CUL-DE-SAC	W GEORGIA AVE	219	32	7,016
SLURRY_SEAL	N 77TH DR	W CAMELBACK RD	W PASADENA AVE	189	28	5,300
SLURRY_SEAL	N 77TH DR	W PASADENA AVE	W READE AVE	284	28	7,949
SLURRY_SEAL	N 77TH DR	W READE AVE	W WINDSOR BLVD	250	28	7,006
SLURRY_SEAL	N 77TH DR	W WINDSOR BLVD	W MEDLOCK DR	250	28	7,001
SLURRY_SEAL	N 77TH DR	W MEDLOCK DR	W ORANGE DR	250	28	7,007
SLURRY_SEAL	N 77TH DR	W ORANGE DR	W COLTER ST	245	28	6,847
SLURRY_SEAL	N 77TH DR	CUL-DE-SAC	W DENTON LN	87	60	5,194
SLURRY_SEAL	N 77TH LN	W MISSOURI AVE	W DENTON LN	373	32	11,946
SLURRY_SEAL	N 77TH LN	W VERMONT AVE	W GEORGIA AVE	443	32	14,162
SLURRY_SEAL	N 77TH LN	W GEORGIA AVE	N 75TH LN	986	32	31,550
SLURRY_SEAL	N 78TH AVE	W ORANGE DR	W COLTER ST	284	28	7,955
SLURRY_SEAL	N 78TH AVE	W MEDLOCK DR	W ORANGE DR	251	28	7,016
SLURRY_SEAL	N 78TH AVE	W WINDSOR BLVD	W MEDLOCK DR	251	28	7,015
SLURRY_SEAL	N 78TH AVE	W READE AVE	W WINDSOR BLVD	250	28	7,007
SLURRY_SEAL	N 78TH AVE	W PASADENA AVE	W READE AVE	231	28	6,478
SLURRY_SEAL	N 78TH AVE	W CAMELBACK RD	W PASADENA AVE	189	28	5,286
SLURRY_SEAL	N 81ST DR	W CAMELBACK RD	W ORANGE DR	914	28	25,599
SLURRY_SEAL	W ACOMA DR	N 54TH AVE	N 52ND AVE	1,627	40	65,066
SLURRY_SEAL	W ACOMA DR	N 58TH AVE	N 57TH AVE	466	40	18,640
SLURRY_SEAL	W ACOMA DR	N 56TH AVE	N 55TH AVE	720	40	28,781
SLURRY_SEAL	W ACOMA DR	N 52ND AVE	N 51ST AVE	744	40	29,760
SLURRY_SEAL	W ACOMA DR	N 59TH AVE	N 58TH AVE	781	40	31,220
SLURRY_SEAL	W ACOMA DR	N 55TH AVE	N 54TH AVE	291	54	15,713
SLURRY_SEAL	W ACOMA DR	N 57TH AVE	N 56TH AVE	676	40	27,030
SLURRY_SEAL	W AIRE LIBRE AVE	N 69TH AVE	N 67TH AVE	1,325	32	42,392
SLURRY_SEAL	W ALICE AVE	N 71ST AVE	N 69TH DR	991	20	19,816
SLURRY_SEAL	W ALICE AVE	N 69TH DR	N 69TH AVE	330	40	13,211
SLURRY_SEAL	W ANGELA DR	N 74TH DR	N 73RD AVE	808	28	22,624
SLURRY_SEAL	W ANGELA DR	N 73RD AVE	N 71ST DR	1,239	28	34,680
SLURRY_SEAL	W BEHREND DR	N 66TH AVE	N 64TH LN	707	32	22,619
SLURRY_SEAL	W BEHREND DR	N 67TH AVE	N 66TH AVE	699	38	26,572

SLURRY SEAL INDEX

SLURRY SEAL	W BLUEFIELD AVE	N 74TH DR	N 73RD AVE	812	28	22,737
SLURRY SEAL	W BLUEFIELD AVE	N 73RD AVE	N 71ST DR	1,102	28	30,858
SLURRY SEAL	W CACTUS WREN DR	N 70TH LN	N 70TH AVE	460	33	14,938
SLURRY SEAL	W CACTUS WREN DR	N 70TH AVE	N 69TH AVE	529	33	17,206
SLURRY SEAL	W CAMPO BELLO DR	N 83RD AVE	N 79TH AVE	831	52	43,202
SLURRY SEAL	W CARO RD	N 75TH AVE	N 74TH DR	469	28	13,118
SLURRY SEAL	W CHRISTY DR	N 55TH DR	N 55TH AVE	231	32	7,394
SLURRY SEAL	W CHRISTY DR	N 57TH AVE	N 55TH DR	678	32	21,706
SLURRY SEAL	W COLTER ST	N 75TH LN	N 75TH AVE	407	32	13,013
SLURRY SEAL	W COLTER ST	CUL-DE-SAC	N 75TH LN	341	32	10,899
SLURRY SEAL	W DELMONICO LN	CUL-DE-SAC	N 66TH DR	229	33	7,567
SLURRY SEAL	W DENTON LN	N 75TH DR	CUL-DE-SAC	268	32	8,588
SLURRY SEAL	W DENTON LN	N 76TH LN	N 75TH DR	695	32	22,224
SLURRY SEAL	W DENTON LN	N 77TH DR	N 76TH LN	452	32	14,470
SLURRY SEAL	W DENTON LN	N 77TH LN	N 77TH DR	297	32	9,509
SLURRY SEAL	W GEORGIA AVE	N 76TH AVE	N 75TH AVE	712	32	22,786
SLURRY SEAL	W GEORGIA AVE	N 76TH LN	N 76TH AVE	359	32	11,474
SLURRY SEAL	W GEORGIA AVE	N 77TH LN	N 76TH LN	369	32	8,600
SLURRY SEAL	W GLENN DR	N 71ST AVE	N 70TH LN	181	33	5,884
SLURRY SEAL	W GLENN DR	N 70TH LN	N 70TH DR	334	33	10,849
SLURRY SEAL	W GLENN DR	N 70TH AVE	N 69TH DR	449	33	14,597
SLURRY SEAL	W GOLDEN LN	N 69TH DR	N 68TH LN	454	32	14,514
SLURRY SEAL	W GOLDEN LN	N 65TH DR	N 65TH AVE	160	33	5,289
SLURRY SEAL	W GOLDEN LN	N 66TH LN	N 66TH AVE	483	33	15,953
SLURRY SEAL	W GOLDEN LN	N 68TH DR	N 67TH LN	271	32	8,673
SLURRY SEAL	W GOLDEN LN	N 67TH LN	N 67TH DR	306	26	7,944
SLURRY SEAL	W GOLDEN LN	N 67TH DR	N 67TH AVE	219	26	5,688
SLURRY SEAL	W GRANDVIEW RD	N 71ST AVE	W BELL RD	1,052	45	47,355
SLURRY SEAL	W GRANDVIEW RD	N 72ND AVE	N 71ST AVE	654	45	29,448
SLURRY SEAL	W GRANDVIEW RD	N 73RD AVE	N 72ND AVE	647	45	29,133
SLURRY SEAL	W GREENWAY RD	N 71ST AVE	W SHERRI JEAN LN	1,287	37	47,636
SLURRY SEAL	W GREENWAY RD	W ZOE ELLA WAY	N 71ST AVE	788	37	29,144
SLURRY SEAL	W GREENWAY RD	W ZOE ELLA WAY	N 69TH AVE	1,004	37	37,160
SLURRY SEAL	W GREENWAY RD	N 69TH AVE	N 67TH LN	738	41	29,902

SLURRY SEAL INDEX

SLURRY_SEAL	W GREENWAY RD	N 67TH LN	N 67TH AVE	596	53	31,443
SLURRY_SEAL	W GROVERS AVE	N 75TH AVE	N 74TH DR	1,318	28	36,891
SLURRY_SEAL	W GROVERS AVE	N 73RD AVE	N 71ST DR	1,141	28	31,956
SLURRY_SEAL	W JOHN CABOT RD	N 75TH AVE	N 74TH DR	467	28	13,083
SLURRY_SEAL	W JOHN CABOT RD	N 73RD AVE	N 71ST DR	1,150	28	32,186
SLURRY_SEAL	W LAURIE LN	N 59TH AVE	N 58TH DR	354	32	11,332
SLURRY_SEAL	W LAURIE LN	N 58TH DR	N 57TH DR	925	32	29,587
SLURRY_SEAL	W LAWRENCE LN	N 69TH DR	N 68TH LN	457	32	14,614
SLURRY_SEAL	W LAWRENCE LN	N 68TH LN	N 68TH DR	269	32	8,618
SLURRY_SEAL	W LAWRENCE LN	N 66TH AVE	N 65TH DR	301	33	11,568
SLURRY_SEAL	W LAWRENCE LN	N 66TH DR	N 66TH AVE	280	33	9,250
SLURRY_SEAL	W LIBBY ST	N 74TH DR	N 73RD AVE	808	28	22,624
SLURRY_SEAL	W LIBBY ST	N 73RD AVE	N 71ST DR	1,142	28	31,970
SLURRY_SEAL	W LUKE AVE	N 75TH AVE	N 74TH DR	336	32	10,751
SLURRY_SEAL	W LUKE AVE	N 74TH DR	N 74TH AVE	322	32	10,299
SLURRY_SEAL	W LUKE AVE	N 74TH AVE	N 73RD LN	159	32	5,097
SLURRY_SEAL	W LUKE AVE	N 73RD LN	N 73RD DR	276	32	8,842
SLURRY_SEAL	W MARYLAND AVE	END OF PAVEMENT	N 74TH AVE	392	20	7,652
SLURRY_SEAL	W MARYLAND AVE	N 74TH AVE	N 73RD AVE	650	20	12,668
SLURRY_SEAL	W MARYLAND AVE	N 73RD AVE	7228 W MARYLAND AVE	319	41	13,067
SLURRY_SEAL	W MARYLAND AVE	7228 W MARYLAND AVE	N 72ND AVE	319	41	13,067
SLURRY_SEAL	W MARYLAND AVE	N 72ND AVE	N 71ST AVE	692	41	28,360
SLURRY_SEAL	W MATILDA LN	N 65TH AVE	N 64TH LN	286	32	9,165
SLURRY_SEAL	W MATILDA LN	N 66TH AVE	N 65TH AVE	297	32	9,505
SLURRY_SEAL	W MERCER LN	N 57TH AVE	CUL-DE-SAC	384	32	12,288
SLURRY_SEAL	W MERCER LN	N 59TH AVE	END OF PAVEMENT	1,268	32	40,572
SLURRY_SEAL	W MIDWAY AVE	N 70TH LN	N 70TH AVE	467	33	15,174
SLURRY_SEAL	W MIDWAY AVE	N 70TH AVE	N 69TH DR	521	33	16,944
SLURRY_SEAL	W NAVAJO DR	N 58TH DR	N 58TH AVE	325	32	10,410
SLURRY_SEAL	W OCOTILLO RD	N 63RD AVE	N 62ND AVE	655	41	26,534
SLURRY_SEAL	W OCOTILLO RD	N 62ND AVE	N 61ST AVE	675	27	18,214
SLURRY_SEAL	W OCOTILLO RD	N 61ST AVE	N 60TH AVE	441	27	11,916
SLURRY_SEAL	W OCOTILLO RD	N 60TH AVE	N 59TH DR	437	27	11,795
SLURRY_SEAL	W OCOTILLO RD	N 59TH DR	N 59TH AVE	455	27	12,294

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SLURRY_SEAL	W ORAIBI DR	N 66TH LN	CUL-DE-SAC	277	32	8,864
SLURRY_SEAL	W ORAIBI DR	W PIUTE AVE	N 65TH DR	829	32	26,535
SLURRY_SEAL	W ORAIBI DR	N 65TH DR	N 65TH AVE	281	32	8,982
SLURRY_SEAL	W ORAIBI DR	N 65TH AVE	N 64TH LN	177	32	5,674
SLURRY_SEAL	W ORANGE DR	N 83RD AVE	N 81ST DR	910	28	25,488
SLURRY_SEAL	W ORANGE DR	N 78TH AVE	N 77TH DR	414	28	11,605
SLURRY_SEAL	W OREGON AVE	N 76TH AVE	CUL-DE-SAC	609	32	19,485
SLURRY_SEAL	W OREGON AVE	CUL-DE-SAC	N 76TH AVE	123	32	3,932
SLURRY_SEAL	W PALMAIRE AVE	N 70TH LN	N 70TH DR	324	33	10,533
SLURRY_SEAL	W PALMAIRE AVE	N 70TH AVE	N 69TH DR	458	33	14,897
SLURRY_SEAL	W PASADENA AVE	N 78TH AVE	N 77TH DR	418	28	11,691
SLURRY_SEAL	W PERSHING AVE	N 67TH AVE	N 65TH DR	938	28	26,258
SLURRY_SEAL	W PIUTE AVE	N 65TH LN	N 65TH AVE	655	32	20,964
SLURRY_SEAL	W PIUTE AVE	N 66TH AVE	N 65TH LN	320	32	10,234
SLURRY_SEAL	W PUGET AVE	N 66TH DR	N 65TH DR	511	33	16,867
SLURRY_SEAL	W PUGET AVE	N 68TH LN	N 68TH DR	229	32	7,321
SLURRY_SEAL	W PUGET AVE	N 68TH DR	N 67TH LN	485	32	15,514
SLURRY_SEAL	W READE AVE	N 78TH AVE	N 77TH DR	414	28	11,588
SLURRY_SEAL	W SAGUARO DR	N 57TH AVE	N 56TH AVE	448	32	14,323
SLURRY_SEAL	W SAINT JOHN RD	N 74TH DR	N 73RD AVE	806	28	22,569
SLURRY_SEAL	W SAINT JOHN RD	N 73RD AVE	N 71ST DR	953	28	26,696
SLURRY_SEAL	W SAN JUAN AVE	N 74TH AVE	N 73RD DR	442	32	14,148
SLURRY_SEAL	W SURREY AVE	N 67TH AVE	N 65TH DR	938	28	26,265
SLURRY_SEAL	W TONTO DR	N 65TH LN	N 64TH LN	556	32	17,793
SLURRY_SEAL	W TONTO DR	N 66TH DR	N 66TH AVE	319	32	10,192
SLURRY_SEAL	W TONTO DR	N 66TH LN	N 66TH DR	171	32	5,472
SLURRY_SEAL	W TOWNLEY AVE	N 68TH LN	N 68TH DR	418	32	13,370
SLURRY_SEAL	W TOWNLEY AVE	N 69TH DR	N 68TH LN	312	32	9,989
SLURRY_SEAL	W TOWNLEY AVE	N 66TH LN	N 66TH DR	252	33	8,302
SLURRY_SEAL	W TOWNLEY AVE	N 66TH AVE	N 65TH DR	231	33	7,616
SLURRY_SEAL	W TOWNLEY AVE	N 65TH DR	N 65TH AVE	165	33	5,455
SLURRY_SEAL	W VERMONT AVE	N 77TH LN	N 76TH LN	540	32	17,272
SLURRY_SEAL	W VERMONT AVE	N 76TH LN	N 75TH LN	521	32	16,665
SLURRY_SEAL	W VERMONT AVE	N 75TH LN	CUL-DE-SAC	443	32	14,183

SLURRY SEAL INDEX

SLURRY_SEAL	W VILLA RITA DR	N 74TH DR	N 73RD AVE	809	28	22,652
SLURRY_SEAL	W VILLA RITA DR	N 73RD AVE	N 71ST DR	1,156	28	32,368
SLURRY_SEAL	W VILLA THERESA DR	N 73RD AVE	N 71ST DR	1,102	28	30,865
SLURRY_SEAL	W VILLA THERESA DR	N 74TH DR	N 73RD AVE	812	28	22,744
SLURRY_SEAL	W VILLAGE DR	N 75TH AVE	N 74TH DR	468	28	13,097
SLURRY_SEAL	W VISTA AVE	N GLEN HARBOR BLVD	END OF PAVEMENT	601	41	24,653
SLURRY_SEAL	W WILLOW AVE	N 67TH AVE	N 65TH DR	918	32	29,361
SLURRY_SEAL	W WINDSOR BLVD	N 78TH AVE	N 77TH DR	414	28	11,595



APPENDIX E

CRACK SEAL

IMPROVEMENT INDEX

CRACK SEAL INDEX

TREATMENT	RD_NAME	RD_FROM	RD_TO	RD_LENGTH	CRACK_SEAL (LF)
CRACK_SEAL	N 106TH AVE	CUL-DE-SAC	N GLEN HARBOR BLVD	453	180
CRACK_SEAL	N 56TH AVE	W PEORIA AVE	W SAGUARO DR	479	790
CRACK_SEAL	N 57TH AVE	W PEORIA AVE	W SAGUARO DR	690	1,518
CRACK_SEAL	N 57TH AVE	W CHRISTY DR	W MERCER LN	254	585
CRACK_SEAL	N 57TH AVE	W SAGUARO DR	W CHRISTY DR	248	632
CRACK_SEAL	N 57TH AVE	W MERCER LN	W DESERT COVE AVE	286	757
CRACK_SEAL	N 57TH DR	W ROYAL PALM RD	W NAVAJO DR	153	1,913
CRACK_SEAL	N 57TH DR	W NAVAJO DR	N 58TH DR	618	5,565
CRACK_SEAL	N 57TH DR	W LAURIE LN	W EVERGREEN RD	285	2,959
CRACK_SEAL	N 57TH DR	CUL-DE-SAC	N 57TH AVE	346	571
CRACK_SEAL	N 58TH AVE	W NAVAJO DR	N 57TH DR	654	6,863
CRACK_SEAL	N 58TH DR	W LAURIE LN	W EVERGREEN RD	692	7,960
CRACK_SEAL	N 58TH DR	W NAVAJO DR	W LAURIE LN	255	3,063
CRACK_SEAL	N 61ST AVE	W OCOTILLO RD	W LAWRENCE RD	340	3,056
CRACK_SEAL	N 61ST AVE	W MICHELLE DR	W MICHIGAN AVE	510	816
CRACK_SEAL	N 61ST AVE	W GROVERS AVE	W MICHELLE DR	666	955
CRACK_SEAL	N 63RD AVE	W UNION HILLS DR	W UTOPIA RD	2,648	16,769
CRACK_SEAL	N 64TH LN	W ORAIBI DR	W TONTO DR	270	351
CRACK_SEAL	N 64TH LN	W TONTO DR	W BEHREND DR	270	378
CRACK_SEAL	N 64TH LN	W BEHREND DR	W MATILDA LN	270	378
CRACK_SEAL	N 65T HDR	W LAWRENCE LN	W GOLDEN LN	404	3,622
CRACK_SEAL	N 65TH AVE	W PIUTE AVE	W ORAIBI DR	344	413
CRACK_SEAL	N 65TH AVE	W MATILDA LN	W ADOBE DR	270	315
CRACK_SEAL	N 65TH AVE	W OLIVE AVE	W HATCHER RD	1,336	8,695
CRACK_SEAL	N 65TH AVE	W HATCHER RD	W MOUNTAIN VIEW RD	1,306	15,281
CRACK_SEAL	N 65TH DR	CUL-DE-SAC	W ORAIBI DR	100	126
CRACK_SEAL	N 65TH DR	W TOWNLEY AVE	W PUGET AVE	275	1,917
CRACK_SEAL	N 65TH DR	W SWEETWATER AVE	W SURREY AVE	531	797
CRACK_SEAL	N 65TH DR	W SURREY AVE	W PERSHING AVE	518	777
CRACK_SEAL	N 65TH DR	W PERSHING AVE	W WILLOW AVE	455	682
CRACK_SEAL	N 65TH DR	W WILLOW AVE	CUL-DE-SAC	154	448
CRACK_SEAL	N 65TH LN	W ORAIBI DR	W TONTO DR	270	351
CRACK_SEAL	N 65TH LN	W PIUTE AVE	CUL-DE-SAC	131	166

CRACK SEAL INDEX

CRACK_SEAL	N 66TH AVE	W TONTO DR	W BEHREND DR	247	337
CRACK_SEAL	N 66TH AVE	W UTOPIA RD	W PIUTE AVE	196	241
CRACK_SEAL	N 66TH AVE	W BEHREND DR	W MATILDA LN	270	365
CRACK_SEAL	N 66TH AVE	W LAWRENCE LN	W GOLDEN LN	433	2,585
CRACK_SEAL	N 66TH AVE	W GOLDEN LN	W TOWNLEY AVE	251	1,457
CRACK_SEAL	N 66TH DR	W TONTO DR	CUL-DE-SAC	161	209
CRACK_SEAL	N 66TH DR	W LAWRENCE LN	W DELMONICO LN	155	1,107
CRACK_SEAL	N 66TH DR	W ALICE AVE	W LAWRENCE LN	161	1,097
CRACK_SEAL	N 66TH DR	W TOWNLEY AVE	W PUGET AVE	245	1,870
CRACK_SEAL	N 66TH LN	W ORAIBI DR	W TONTO DR	294	383
CRACK_SEAL	N 66TH LN	N 66TH AVE	W ORAIBI DR	760	988
CRACK_SEAL	N 66TH LN	W GOLDEN LN	W TOWNLEY AVE	276	1,416
CRACK_SEAL	N 67TH DR	W GOLDEN LN	CUL-DE-SAC	141	750
CRACK_SEAL	N 67TH LN	W GOLDEN LN	W PUGET AVE	451	1,796
CRACK_SEAL	N 68TH DR	W LAWRENCE LN	W GOLDEN LN	530	2,585
CRACK_SEAL	N 68TH DR	W GOLDEN LN	W TOWNLEY AVE	175	796
CRACK_SEAL	N 68TH DR	W PUGET AVE	W OLIVE AVE	199	645
CRACK_SEAL	N 68TH LN	W LAWRENCE LN	W GOLDEN LN	435	1,846
CRACK_SEAL	N 68TH LN	W TOWNLEY AVE	W PUGET AVE	271	975
CRACK_SEAL	N 69TH AVE	W DIANA AVE	W RUTH AVE	279	2,680
CRACK_SEAL	N 69TH AVE	W RUTH AVE	W ALICE AVE	354	1,345
CRACK_SEAL	N 69TH DR	W LAWRENCE LN	W GOLDEN LN	401	2,231
CRACK_SEAL	N 69TH DR	W GOLDEN LN	W TOWNLEY AVE	321	1,782
CRACK_SEAL	N 69TH DR	W PALMAIRE AVE	W MIDWAY AVE	280	925
CRACK_SEAL	N 69TH DR	W GLENN DR	W PALMAIRE AVE	280	1,009
CRACK_SEAL	N 69TH DR	W CACTUS WREN DR	W GLENN DR	275	797
CRACK_SEAL	N 70TH AVE	W MIDWAY AVE	W MYRTLE AVE	170	500
CRACK_SEAL	N 70TH AVE	W GLENN DR	W PALMAIRE AVE	280	743
CRACK_SEAL	N 70TH AVE	W GLENDALE AVE	W CACTUS WREN DR	297	2,228
CRACK_SEAL	N 70TH DR	W GLENN DR	W PALMAIRE AVE	281	926
CRACK_SEAL	N 70TH LN	W CACTUS WREN DR	W GLENN DR	275	1,003
CRACK_SEAL	N 70TH LN	W PALMAIRE AVE	W MIDWAY AVE	290	1,044
CRACK_SEAL	N 71ST AVE	W GREENWAY RD	W NANCY RD	481	4,835
CRACK_SEAL	N 71ST AVE	W RANCHO DR	W BETHANY HOME RD	664	598

CRACK SEAL INDEX

CRACK_SEAL	N 71ST AVE	W MONTEBELLO AVE	W RANCHO DR	786	825
CRACK_SEAL	N 71ST AVE	W MISSOURI AVE	W MONTEBELLO AVE	1,204	2,768
CRACK_SEAL	N 71ST AVE	W COLTER ST	W MISSOURI AVE	1,318	7,378
CRACK_SEAL	N 71ST AVE	W MEDLOCK DR	W COLTER ST	481	2,936
CRACK_SEAL	N 71ST AVE	W CAMELBACK RD	W MEDLOCK DR	834	4,501
CRACK_SEAL	N 71ST DR	W ANGELA DR	W GROVERS AVE	423	655
CRACK_SEAL	N 71ST DR	W BLUEFIELD AVE	W VILLA THERESA DR	513	871
CRACK_SEAL	N 71ST DR	W LIBBY ST	W JOHN CABOT RD	399	639
CRACK_SEAL	N 71ST DR	W JOHN CABOT RD	W VILLA RITA DR	371	594
CRACK_SEAL	N 73RD AVE	W SANDRA TER	W GRANDVIEW RD	585	497
CRACK_SEAL	N 73RD AVE	W SHERRI JEAN LN	W SANDRA TER	1,158	3,880
CRACK_SEAL	N 73RD AVE	W SAINT JOHN RD	W GROVERS AVE	364	763
CRACK_SEAL	N 73RD AVE	W LIBBY ST	W GROVERS AVE	358	680
CRACK_SEAL	N 73RD AVE	W BLUEFIELD AVE	W JOHN CABOT RD	867	1,604
CRACK_SEAL	N 73RD AVE	W ANGELA DR	W SAINT JOHN RD	692	1,384
CRACK_SEAL	N 73RD AVE	W UNION HILLS DR	W BLUEFIELD AVE	1,017	2,084
CRACK_SEAL	N 73RD AVE	W LIBBY ST	W JOHN CABOT RD	346	587
CRACK_SEAL	N 73RD DR	W LUKE AVE	W SAN JUAN AVE	254	483
CRACK_SEAL	N 73RD DR	W MISSOURI AVE	W LUKE AVE	32	271
CRACK_SEAL	N 73RD LN	CUL-DE-SAC	W LUKE AVE	81	154
CRACK_SEAL	N 74TH AVE	W LUKE AVE	W SAN JUAN AVE	254	482
CRACK_SEAL	N 74TH AVE	W BLUEFIELD AVE	W VILLA THERESA DR	513	744
CRACK_SEAL	N 74TH DR	W LUKE AVE	CUL-DE-SAC	138	552
CRACK_SEAL	N 74TH DR	CUL-DE-SAC	W LUKE AVE	80	164
CRACK_SEAL	N 74TH DR	W ANGELA DR	W SAINT JOHN RD	520	858
CRACK_SEAL	N 74TH DR	W LIBBY ST	W VILLA RITA DR	518	907
CRACK_SEAL	N 75TH AVE E FRONTAGE	W CARO RD	W UNION HILLS DR	533	1,609
CRACK_SEAL	N 75TH AVE E FRONTAGE	W JOHN CABOT RD	W CARO RD	1,027	2,876
CRACK_SEAL	N 75TH AVE E FRONTAGE	W GROVERS AVE	W JOHN CABOT RD	731	2,075
CRACK_SEAL	N 75TH DR	W DENTON LN	W MISSOURI AVE	173	435
CRACK_SEAL	N 75TH LN	W GEORGIA AVE	W VERMONT AVE	271	962
CRACK_SEAL	N 75TH LN	N 77TH LN	W COLTER ST	279	878
CRACK_SEAL	N 76TH AVE	W OREGON AVE	W GEORGIA AVE	271	316
CRACK_SEAL	N 76TH LN	W VERMONT AVE	W DENTON LN	270	1,078

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CRACK_SEAL	N 76TH LN	CUL-DE-SAC	W GEORGIA AVE	219	877
CRACK_SEAL	N 77TH DR	W CAMELBACK RD	W PASADENA AVE	189	2,167
CRACK_SEAL	N 77TH DR	W PASADENA AVE	W READE AVE	284	3,066
CRACK_SEAL	N 77TH DR	W READE AVE	W WINDSOR BLVD	250	2,515
CRACK_SEAL	N 77TH DR	W WINDSOR BLVD	W MEDLOCK DR	250	2,538
CRACK_SEAL	N 77TH DR	W MEDLOCK DR	W ORANGE DR	250	2,740
CRACK_SEAL	N 77TH DR	W ORANGE DR	W COLTER ST	245	2,739
CRACK_SEAL	N 77TH DR	CUL-DE-SAC	W DENTON LN	87	865
CRACK_SEAL	N 77TH LN	W MISSOURI AVE	W DENTON LN	373	1,064
CRACK_SEAL	N 77TH LN	W VERMONT AVE	W GEORGIA AVE	443	1,283
CRACK_SEAL	N 77TH LN	W GEORGIA AVE	N 75TH LN	986	3,697
CRACK_SEAL	N 78TH AVE	W ORANGE DR	W COLTER ST	284	3,608
CRACK_SEAL	N 78TH AVE	W MEDLOCK DR	W ORANGE DR	251	1,044
CRACK_SEAL	N 78TH AVE	W READE AVE	W WINDSOR BLVD	250	2,540
CRACK_SEAL	N 78TH AVE	W PASADENA AVE	W READE AVE	231	1,003
CRACK_SEAL	N 78TH AVE	W CAMELBACK RD	W PASADENA AVE	189	2,039
CRACK_SEAL	N 78TH DR	W WINDSOR BLVD	W MEDLOCK DR	251	2,881
CRACK_SEAL	N 81ST DR	W CAMELBACK RD	W ORANGE DR	914	7,086
CRACK_SEAL	W ACOMA DR	N 54TH AVE	N 52ND AVE	1,627	18,869
CRACK_SEAL	W ACOMA DR	N 56TH AVE	N 55TH AVE	720	5,468
CRACK_SEAL	W ACOMA DR	N 58TH AVE	N 57TH AVE	466	1,538
CRACK_SEAL	W ACOMA DR	N 52ND AVE	N 51ST AVE	744	5,952
CRACK_SEAL	W ACOMA DR	N 59TH AVE	N 58TH AVE	781	2,342
CRACK_SEAL	W ACOMA DR	N 55TH AVE	N 54TH AVE	291	6,984
CRACK_SEAL	W ACOMA DR	N 57TH AVE	N 56TH AVE	676	2,500
CRACK_SEAL	W AIRE LIBRE AVE	N 69TH AVE	N 67TH AVE	1,325	11,327
CRACK_SEAL	W ALICE AVE	N 71ST AVE	N 69TH DR	991	4,161
CRACK_SEAL	W ALICE AVE	N 69TH DR	N 69TH AVE	330	727
CRACK_SEAL	W ANGELA DR	N 74TH DR	N 73RD AVE	808	1,131
CRACK_SEAL	W ANGELA DR	N 73RD AVE	N 71ST DR	1,239	2,229
CRACK_SEAL	W BEHREND DR	N 66TH AVE	N 64TH LN	707	872
CRACK_SEAL	W BEHREND DR	N 67TH AVE	N 66TH AVE	699	816
CRACK_SEAL	W BLUEFIELD AVE	N 74TH DR	N 73RD AVE	812	1,502
CRACK_SEAL	W BLUEFIELD AVE	N 73RD AVE	N 71ST DR	1,102	1,708

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CRACK_SEAL	W CACTUS WREN DR	N 70TH LN	N 70TH AVE	460	1,149
CRACK_SEAL	W CACTUS WREN DR	N 70TH AVE	N 69TH AVE	529	1,535
CRACK_SEAL	W CAMPO BELLO DR	W 83RD AVE	W 79TH AVE	831	5,212
CRACK_SEAL	W CARO RD	N 75TH AVE	N 74TH DR	469	796
CRACK_SEAL	W CHRISTY DR	N 57TH AVE	N 55TH DR	678	984
CRACK_SEAL	W COLTER ST	N 75TH LN	N 75TH AVE	407	1,464
CRACK_SEAL	W COLTER ST	CUL-DE-SAC	N 75TH LN	341	920
CRACK_SEAL	W DELMONICO LN	CUL-DE-SAC	N 66TH DR	229	1,293
CRACK_SEAL	W DENTON LN	N 75TH DR	CUL-DE-SAC	268	751
CRACK_SEAL	W DENTON LN	N 76TH LN	N 75TH DR	695	2,813
CRACK_SEAL	W DENTON LN	N 77TH DR	N 76TH LN	452	1,583
CRACK_SEAL	W DENTON LN	N 77TH LN	N 77TH DR	297	996
CRACK_SEAL	W GEORGIA AVE	N 76TH AVE	N 75TH AVE	712	2,955
CRACK_SEAL	W GEORGIA AVE	N 76TH LN	N 76TH AVE	359	1,703
CRACK_SEAL	W GEORGIA AVE	N 77TH LN	N 76TH LN	269	12,093
CRACK_SEAL	W GLENN DR	N 71ST AVE	N 70TH LN	181	470
CRACK_SEAL	W GLENN DR	N 70TH LN	N 70TH DR	334	1,135
CRACK_SEAL	W GLENN DR	N 70TH AVE	N 69TH DR	449	808
CRACK_SEAL	W GOLDEN LN	N 69TH DR	N 68TH LN	454	2,667
CRACK_SEAL	W GOLDEN LN	N 65TH DR	N 65TH AVE	160	904
CRACK_SEAL	W GOLDEN LN	N 66TH LN	N 65TH AVE	483	2,968
CRACK_SEAL	W GOLDEN LN	N 68TH DR	N 67TH LN	271	1,236
CRACK_SEAL	W GOLDEN LN	N 67TH LN	N 67TH DR	306	1,228
CRACK_SEAL	W GOLDEN LN	N 67TH DR	N 67TH AVE	219	1,006
CRACK_SEAL	W GRANDVIEW RD	N 71ST AVE	W BELL RD	1,052	8,524
CRACK_SEAL	W GRANDVIEW RD	N 72ND AVE	N 71ST AVE	654	3,992
CRACK_SEAL	W GRANDVIEW RD	N 73RD AVE	N 72ND AVE	647	2,590
CRACK_SEAL	W GREENWAY RD	N 71ST AVE	W SHERRI JEAN LN	1,287	3,026
CRACK_SEAL	W GREENWAY RD	W ZOE ELLA WAY	N 71ST AVE	788	9,728
CRACK_SEAL	W GREENWAY RD	W ZOE ELLA WAY	N 69TH AVE	1,004	13,056
CRACK_SEAL	W GREENWAY RD	N 69TH AVE	N 67TH LN	738	4,504
CRACK_SEAL	W GREENWAY RD	N 67TH LN	N 67TH AVE	596	1,113
CRACK_SEAL	W GROVERS AVE	N 75TH AVE	N 74TH DR	1,318	2,108
CRACK_SEAL	W GROVERS AVE	N 73RD AVE	N 71ST DR	1,141	1,826

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CRACK SEAL	W JOHN CABOT RD	N 75TH AVE	N 74TH DR	467	724
CRACK SEAL	W JOHN CABOT RD	N 73RD AVE	N 71ST DR	1,150	1,897
CRACK SEAL	W LAURIE LN	N 59TH AVE	N 58TH DR	354	3,895
CRACK SEAL	W LAURIE LN	N 58TH DR	N 57TH DR	925	9,061
CRACK SEAL	W LAWRENCE LN	N 69TH DR	N 68TH LN	457	2,521
CRACK SEAL	W LAWRENCE LN	N 68TH LN	N 68TH DR	269	1,670
CRACK SEAL	W LAWRENCE LN	N 66TH AVE	N 65TH DR	301	2,615
CRACK SEAL	W LAWRENCE LN	N 66TH DR	N 66TH AVE	280	2,139
CRACK SEAL	W LIBBY ST	N 74TH DR	N 73RD AVE	808	1,252
CRACK SEAL	W LIBBY ST	N 73RD AVE	N 71ST DR	1,142	1,770
CRACK SEAL	W LUKE AVE	N 75TH AVE	N 74TH DR	336	1,277
CRACK SEAL	W LUKE AVE	N 74TH DR	N 74TH AVE	322	1,303
CRACK SEAL	W LUKE AVE	N 74TH AVE	N 73RD LN	159	255
CRACK SEAL	W LUKE AVE	N 73RD LN	N 73RD DR	276	484
CRACK SEAL	W MARYLAND AVE	END OF PAVEMENT	N 74TH AVE	392	2,747
CRACK SEAL	W MARYLAND AVE	N 74TH AVE	N 73RD AVE	650	2,696
CRACK SEAL	W MARYLAND AVE	N 73RD AVE	7228 W MARYLAND AVE	319	1,418
CRACK SEAL	W MARYLAND AVE	7228 W MARYLAND AVE	72ND AVE	319	1,339
CRACK SEAL	W MARYLAND AVE	N 72ND AVE	N 71ST AVE	692	5,776
CRACK SEAL	W MATILDA LN	N 65TH AVE	N 64TH LN	286	401
CRACK SEAL	W MATILDA LN	N 66TH AVE	N 65TH AVE	297	376
CRACK SEAL	W MERCER LN	N 57TH AVE	CUL-DE-SAC	384	710
CRACK SEAL	W MERCER LN	N 59TH AVE	END OF PAVEMENT	1,268	7,861
CRACK SEAL	W MIDWAY AVE	N 70TH LN	N 70TH AVE	467	2,078
CRACK SEAL	W MIDWAY AVE	N 70TH AVE	N 69TH DR	521	3,154
CRACK SEAL	W NAVAJO DR	N 58TH DR	N 58TH AVE	325	3,253
CRACK SEAL	W OCOTILLO RD	N 63RD AVE	N 62ND AVE	655	5,569
CRACK SEAL	W OCOTILLO RD	N 62ND AVE	N 61ST AVE	675	3,677
CRACK SEAL	W OCOTILLO RD	N 61ST AVE	N 60TH AVE	441	1,986
CRACK SEAL	W OCOTILLO RD	N 60TH AVE	N 59TH DR	437	2,840
CRACK SEAL	W OCOTILLO RD	N 59TH DR	N 59TH AVE	455	3,074
CRACK SEAL	W ORAIBI DR	N 66TH LN	CUL-DE-SAC	277	351
CRACK SEAL	W ORAIBI DR	W PIUTE AVE	N 65TH DR	829	1,106
CRACK SEAL	W ORAIBI DR	N 65TH LN	N 65TH AVE	281	379

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CRACK_SEAL	W ORAIBI DR	N 65TH AVE	N 64TH LN	177	254
CRACK_SEAL	W ORANGE DR	N 83RD AVE	N 81ST DR	910	8,511
CRACK_SEAL	W ORANGE DR	N 78TH AVE	N 77TH DR	414	3,813
CRACK_SEAL	W OREGON AVE	N 76TH AVE	CUL-DE-SAC	32	599
CRACK_SEAL	W OREGON AVE	CUL-DE-SAC	N 76TH AVE	123	1,065
CRACK_SEAL	W PALMAIRE AVE	N 70TH LN	N 70TH DR	324	1,280
CRACK_SEAL	W PALMAIRE AVE	N 70TH AVE	N 69TH DR	458	1,077
CRACK_SEAL	W PASADENA AVE	N 78TH AVE	N 77TH DR	472	2,714
CRACK_SEAL	W PERSHING AVE	N 67TH AVE	N 65TH DR	938	4,689
CRACK_SEAL	W PIUTE AVE	N 65TH LN	N 65TH AVE	655	786
CRACK_SEAL	W PIUTE AVE	N 66TH AVE	N 65TH LN	320	437
CRACK_SEAL	W PUGET AVE	N 66TH DR	N 65TH DR	511	2,883
CRACK_SEAL	W PUGET AVE	N 68TH LN	N 68TH DR	229	897
CRACK_SEAL	W PUGET AVE	N 68TH DR	N 67TH LN	485	2,056
CRACK_SEAL	W READE AVE	N 78TH AVE	N 77TH DR	414	2,587
CRACK_SEAL	W SAGUARO DR	N 57TH AVE	N 56TH AVE	448	783
CRACK_SEAL	W SAINT JOHN RD	N 74TH DR	N 73RD AVE	806	1,128
CRACK_SEAL	W SAINT JOHN RD	N 73RD AVE	N 71ST DR	953	1,382
CRACK_SEAL	W SAN JUAN AVE	N 74TH AVE	N 73RD DR	442	729
CRACK_SEAL	W SURREY AVE	N 67TH AVE	N 65TH DR	938	1,407
CRACK_SEAL	W TONTO DR	N 65TH LN	N 64TH LN	556	751
CRACK_SEAL	W TONTO DR	N 66TH DR	N 66TH AVE	319	425
CRACK_SEAL	W TONTO DR	N 66TH LN	N 66TH DR	171	211
CRACK_SEAL	W TOWNLEY AVE	N 68TH LN	N 68TH DR	418	2,457
CRACK_SEAL	W TOWNLEY AVE	N 69TH DR	N 68TH LN	312	1,324
CRACK_SEAL	W TOWNLEY AVE	N 66TH LN	N 66TH DR	252	1,084
CRACK_SEAL	W TOWNLEY AVE	N 66TH AVE	N 65TH DR	231	1,530
CRACK_SEAL	W TOWNLEY AVE	N 65TH DR	N 65TH AVE	165	1,124
CRACK_SEAL	W VERMONT AVE	N 77TH LN	N 76TH LN	540	513
CRACK_SEAL	W VERMONT AVE	N 76TH LN	N 75TH LN	521	2,109
CRACK_SEAL	W VERMONT AVE	N 75TH LN	CUL-DE-SAC	443	1,308
CRACK_SEAL	W VILLA RITA DR	N 74TH DR	N 73RD AVE	809	1,375
CRACK_SEAL	W VILLA RITA DR	N 73RD AVE	N 71ST DR	1,156	1,734
CRACK_SEAL	W VILLA THERESA DR	N 73RD AVE	N 71ST DR	1,102	1,984

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CRACK_SEAL	W VILLA THERESA DR	N 74TH DR	N 73RD AVE	812	1,340
CRACK_SEAL	W VILLAGE DR	N 75TH AVE	N 74TH DR	468	842
CRACK_SEAL	W VISTA AVE	N GLEN HARBOR BLVD	END OF PAVEMENT	601	2,706
CRACK_SEAL	W WILLOW AVE	N 67TH AVE	N 65TH DR	918	2,202
CRACK_SEAL	W WINDSOR BLVD	N 78TH AVE	N 77TH DR	414	2,733



APPENDIX F

**ASPHALT REPAIR AREA
IMPROVEMENT INDEX**

ASPHALT REPAIR AREA INDEX

TREATMENT	RD_NAME	LOCATION	PVMT_AREA
Asphalt_Repair	N 57TH AVE	10871 N 57TH AVE	16
Asphalt_Repair	N 57TH AVE	10872 N 57TH AVE	160
Asphalt_Repair	N 65TH DR	8809 N 65TH DR	120
Asphalt_Repair	N 66TH AVE	8803 N 66TH AVE	1,278
Asphalt_Repair	N 66TH AVE	8827 N 66TH AVE	1,376
Asphalt_Repair	N 66TH DR	8754 N 66TH DR	581
Asphalt_Repair	N 69TH AVE	8755 N 69TH AVE	40
Asphalt_Repair	N 69TH AVE	8775 N 69TH AVE	10
Asphalt_Repair	N 69TH AVE	7207 N 69TH DR	69
Asphalt_Repair	N 69TH DR	7135 N 69TH DR	450
Asphalt_Repair	N 69TH DR	7119 N 69TH DR	39
Asphalt_Repair	N 73RD AVE	16500 N 73RD AVE	9
Asphalt_Repair	N 75TH LN	S OF BLK WALL ON E SIDE	6
Asphalt_Repair	N 77TH DR	5111 N 77TH DR	4
Asphalt_Repair	N 77TH DR	5121 N 77TH DR	28
Asphalt_Repair	N 81ST DR	5215 N 81ST DR	18
Asphalt_Repair	W AIRE LIBRE AVE	6823 W AIRE LIBRE AVE	132
Asphalt_Repair	W AIRE LIBRE AVE	6805 W AIRE LIBRE AVE	72
Asphalt_Repair	W ALICE AVE	6950 W ALICE AVE	100
Asphalt_Repair	W CACTUS WREN DR	6991 W CACTUS WREN DR	72
Asphalt_Repair	W COLTER ST	7574 W COLTER ST	72
Asphalt_Repair	W DELMONICO LN	6671 W DELMONICO LN	6,821
Asphalt_Repair	W GEORGIA AVE	7606 W GEORGIA AVE	8
Asphalt_Repair	W GEORGIA AVE	7605 W GEORGIA AVE	28
Asphalt_Repair	W GLENN DR	7073 W GLENN DR	27
Asphalt_Repair	W GOLDEN LN	6635 W GOLDEN LN	2,826
Asphalt_Repair	W GRANDVIEW RD	7100 W GRANDVIEW RD	12
Asphalt_Repair	W GRANDVIEW RD	7200 W GRANDVIEW RD	126
Asphalt_Repair	W GREENWAY RD	7021 W GREENWAY RD	47
Asphalt_Repair	W GREENWAY RD	6805 W GREENWAY RD	9
Asphalt_Repair	W GREENWAY RD	6905 W GREENWAY RD	546
Asphalt_Repair	W GREENWAY RD	6905 W GREENWAY RD	14
Asphalt_Repair	W GREENWAY RD	6764 W GREENWAY RD	63

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Asphalt_Repair	W LAWRENCE LN	6617 W LAWRENCE LN	1,185
Asphalt_Repair	W MARYLAND AVE	7410 W MARYLAND AVE	140
Asphalt_Repair	W OCOTILLO RD	6221 W OCOTILLO RD	16
Asphalt_Repair	W OCOTILLO RD	6124 W OCOTILLO RD	20
Asphalt_Repair	W OCOTILLO RD	6145 W OCOTILLO RD	455
Asphalt_Repair	W OREGON AVE	7607 W OREGON AVE	72
Asphalt_Repair	W PALMAIRE AVE	7062 W PALMAIRE AVE	21
Asphalt_Repair	W PASADENA AVE	7745 W PASADENA AVE	99
Asphalt_Repair	W TOWNLEY AVE	6547 W TOWNLEY AVE	1,266
Asphalt_Repair	W TOWNLEY AVE	6874 W TOWNLEY AVE	50
Asphalt_Repair	W TOWNLEY AVE	6882 W TOWNLEY AVE	15
Asphalt_Repair	W VERMONT AVE	7696 W VERMONT AVE	92