C-10033
06/09/2015

CITY CLERK
ORIGINAL

PROJECT SPECIFICATIONS AND CONTRACT DOCUMENTS

PROJECT NO. 141514

20214/2015 PAVEMENT MANAGEMENT PROGRAM – SLURRY SEAL 2

APRIL, 2015

GLENDALE AZ

Registered Professional Engineer (Civil)
CERTIFICATE NO
28940
FRANK E.
HENDERSON III
Date Signed 3/24/15
ARIZONA U.S.A.

EXPIRES 3/31/16

CITY OF GLENDALE

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

C-10033
06/09/15

GLENDALE

Engineering Department

Memorandum

DATE: April 13, 2015
TO: All Plan and Specification Holders
FROM: Engineering
SUBJECT: PROJECT NO. 141514 – 2014/2015 PAVEMENT MANAGEMENT PROGRAM – SLURRY SEAL PHASE 2

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 Provision No. 11 "CONSTRUCTION MATERIALS SAMPLING AND TESTING", last paragraph on page 44 is deleted in its entirety and is replaced with following:
  - "Payment for this item shall be incidental to unit price bid for Item 3 "ASPHALT REPAIR (REMOVE/REPLACE), 12.5mm."
- Special Provision No. 11 "CONSTRUCTION MATERIALS SAMPLING AND TESTING", table for "ASPHALTIC CONCRETE MINIMUM SAMPLING AND TESTING FREQUENCY on page 45, column for "MINIMUM SAMPLE FREQUENCY" of "UNCOMPACTED ASPHALTIC CONCRETE MIXTURE" is modified as follows:
  - "IGNITION - GRADATION: 1 - PER FIRST 500 TONS FROM EACH SUPPLIER
  - GYRATORY COMPACTION: 1 - PER FIRST 500 TONS FROM EACH SUPPLIER
  - MAX. THEORETICAL SPECIFIC GRAVITY: 1 - PER FIRST 500 TONS FROM EACH SUPPLIER
  - IGNITION - GRADATION: 1 - PER EACH ADDITIONAL 500 TONS PRODUCED
  - MARSHALL COMPACTION: 1 - PER FIRST 500 TONS FROM EACH SUPPLIER"
- Technical Specifications PART B: BID ITEM NO. 3 "ASPHALT REPAIR (REMOVE/REPLACE), 12.5 mm", page 7, first paragraph under "Description" is deleted and replaced with the following:
  - "The work described herein shall consist of sawcutting asphalt to limits marked in the field, removal of full depth asphaltic concrete, scarify and re-compact full depth existing aggregate base to requirements listed in Special Provision No. 11, and install 1/2" (12.5 mm) asphaltic concrete to match existing depth or minimum 3" depth whichever is greater for each asphalt repair area.
- Technical Specifications PART B: BID ITEM NO. 5 "SLURRY SEAL", beginning on page 11, is modified to add the following:
  - "The work shall include any tree trimming within street right-of-way required for construction equipment, shall be approved in advance by Engineer and is considered incidental to this Bid Item."
- Technical Specifications PART C: BID ALTERNATIVES ITEM BA1, page 32, is deleted in its entirety.

THIS ADDENDUM CONSISTS OF ONE PAGE

Registered Professional Engineer (Civil) CERTIFICATE NO. 28940 FRANK E. HENDERSON III Date Signed 4/13/15 ARIZONA U.S.A.

EXPIRES 3/31/16

CITY CLERK
ORIGINAL

PROJECT SPECIFICATIONS AND CONTRACT DOCUMENTS

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COUNCIL MEMBERS
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Samuel U. Chavira
Ian Hugh
Gary D. Sherwood
Lauren Tolmachoff
Bart Turner

ACTING CITY MANAGER
Richard A. Bowers

CITY ATTORNEY
Michael D. Bailey

CITY CLERK
Pamela Hanna

CITY ENGINEER
David D. Beard

GLENDALE

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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. 141514, 2014/2015 PAVEMENT MANAGEMENT PROGRAM - SLURRY SEAL 2.** Project includes coverage of approximately 10.5 road miles, utilizing TYPE 2 Slurry Seal, and all associated work such as repair of damaged asphalt, crack seal, traffic control, striping removal/replacement, ancillary concrete repair, etc.

Bids must be received by the Engineering Department of the City of Glendale no later than 9:00 am, April 16, 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 April 9, 2015, at 10:00 am, 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 $40.00 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 fifty (50) 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

Published: March 26 & April 2, 2015
The Glendale Star

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 days (90 days) 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 April 9, 2015, at 10:00 am, 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 WEST SACRAMENTO, CALIFORNIA

Date APRIL 14, 2015

Proposal of VSS INTERNATIONAL, INC., a Corporation organized and existing under the laws of the State of Arizona. a partnership consisting of N/A; or an individual trading as N/A.

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 141514 - 2014/2015 PAVEMENT MANAGEMENT PROGRAM - SLURRY SEAL 2,** 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 TAB
2014/2015 PAVEMENT MANAGEMENT PROGRAM - SLURRY SEAL 2
PROJECT NO. 141514

BID ITEM	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL BID
1	Mobilization / Demobilization	1	LS	$46,385.96	$46,285.96
2	Project Signs	1	LS	$1,050.00	$1,050.00
3	Asphalt Repair (Remove/Replace), 12.5mm	476	SY	$66.75	$31,773.00
4	Crack Seal	430,000	LF	$0.23	$98,900.00
5	Slurry Seal	247,517	SY	$1.05	$259,892.85
6	Obliterate Existing Pavement Markings	137,810	LF	$0.23	$31,696.30
7	White Stripe (Paint) 4" Equivalent	91,043	LF	$0.13	$11,835.59
8	Yellow Stripe (Paint) Equivalent	46,767	LF	$0.13	$6,079.71
9	Pavement Marking Arrow (Paint)	37	EA	$36.75	$1,359.75
10	Preformed Pavement Marking Arrows (90 MIL)	37	EA	$110.00	$4,070.00
11	Preformed Pavement Markings Speed Cushion (90 MIL)	12	EA	$393.75	$4,725.00
12	White Stripe (60 MIL Thermoplastic) 4" Equivalent	80,504	LF	$0.23	$18,515.92
13	White Stripe (90 MIL Thermoplastic) 4" Equivalent	10,539	LF	$0.40	$4,215.60
14	Yellow Stripe (60 MIL Thermoplastic) 4" Equivalent	45,969	LF	$0.23	$10,572.87
15	Yellow Stripe (90 MIL Thermoplastic) 4" Equivalent	798	LF	$0.40	$319.20
16	Raised Pavement Marker (Type D/G)	350	EA	$4.16	$1,456.00
17	Raised Pavement Marker (Hydrant Marker, Type DB, Blue)	80	EA	$4.15	$332.00
18	Traffic Control	1	LS	$210,885.25	$210,885.25
19	Uniformed, Off-duty Law Enforcement Officer Contingency	200	HR	$53.00	$10,600.00
20	Allowance for Concrete Manhole Ring Remove and Replace	25	EA	$331.00	$8,275.00
21	Allowance for Concrete Valve Ring Remove and Replace	25	EA	$310.00	$7,750.00

22	Allowance for Concrete Sidewalk Remove and Replace	2,000	SF	$7.60	$15,200.00
23	Allowance for Concrete Curb and Gutter Remove and Replace	1,000	LF	$24.79	$24,790.00
24	Allowance for Concrete Valley Gutter Remove and Replace	1,500	SF	$14.88	$22,320.00
25	Owners Allowance for Construction Contingencies	1	LS	$50,000.00	$50,000.00
				Total Base Bid	$883,000.00

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,

VSS INTERNATIONAL, INC.
Contractor

By _____

JORDAN REED, TREASURER

6751 GALVESTON STREET, CHANDLER, ARIZONA 85226
(Complete business address)

Arizona Contractor's Classification and License No.

285579A

Telephone Number: (602) 809-2502
Fax Number (480) 961-0766

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

1

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

Acknowledged by _____

Project 141514

CONSTRUCTION AGREEMENT

This Construction Agreement ("Agreement") is entered into and effective between the CITY OF GLENDALE, an Arizona municipal corporation ("City"), and VSS International, Inc., a California corporation, authorized to do business in Arizona ("Contractor") as of the 9th day of June, 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.

(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.

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 $883,000, 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-contactors 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. Prohibitions. Contractor certifies under A.R.S. §§ 35-391 *et seq.* and 35-393 *et seq.*, that it does not have, and during the term of this Agreement will not have "scrutinized" business operations, as defined in the preceding statutes, in the countries of Sudan or Iran.

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:

VSS International, Inc.
Attn: Joffrey Reed
6751 Galveston Street
Chandler, Arizona 85226

(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: Tom Kaczmarowski
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.

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 141514

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

VSS International, Inc.
a California corporation

By: Jeffrey Reed
Its: President/CEO

WOMEN-OWNED/MINORITY BUSINESS [ ] YES [X] NO
CITY OF GLENDALE TRANSACTION PRIVILEGE TAX NO.
FEDERAL TAXPAYER IDENTIFICATION NO. [redacted]

Project 141514

EXHIBIT A
CONSTRUCTION AGREEMENT

PROJECT

Project includes coverage of approximately 10.5 road miles at various locations within the City of Glendale, utilizing TYPE 2 Slurry Seal, and all associated work such as repair of damaged asphalt, crack seal, traffic control, striping removal/replacement, ancillary concrete repair, etc.

Project 141514

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 883,000.

DETAILED PROJECT COMPENSATION

As shown on Pages 8 & 9 of the Bid Schedule.

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

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)

Bond No: 929615455
Premium: $2,649.00

KNOW ALL MEN BY THESE PRESENTS:

That VSS International, Inc. (hereinafter called the Principal), as Principal, and * , a corporation organized and existing under the laws of the State of South Dakota with its principal office in the City of Sioux Falls, (hereinafter called the Surety), as Surety, are held and firmly bound unto the City of Glendale, a municipal corporation, (hereinafter called the Obligee), in the amount of Eight Hundred Eighty Three Thousand and 00/100 Dollars ($ 883,000.00), 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 Obligee, dated the 9th day of June , 20 15, to construct **PROJECT 141514 - 2014/2015 PAVEMENT MANAGEMENT PROGRAM - SLURRY SEAL 2** , which contract is hereby referred to and made a part hereof as fully and to the same extent as if copied at length herein.

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 24th day of June , 20 15 .

VSS International, Inc.
Principal Seal

By Jeff Roberts, C.O.O.

Western Surety Company
By:
Surety Thomas R. Hucik, Attorney-in-Fact Seal

Wells Fargo Insurance Services
Agency of Record

10940 White Rock Road, 2nd FL
Rancho Cordova, CA 95670
Agency Address

Telephone Number: 916-589-8000

*Western Surety Company

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of Sacramento)

On June 24, 2015 before me, Rosalie A. Miszkiel, Notary Public
(insert name and title of the officer)

personally appeared Thomas R. Hucik,
who proved to me on the basis of satisfactory evidence to be the person(~~s~~) whose name(s) is/~~are~~ subscribed to the within instrument and acknowledged to me that he/~~she/they~~ executed the same in his/~~her/their~~ authorized capacity(~~ies~~), and that by his/~~her/their~~ signature(~~s~~) on the instrument the person(~~s~~), or the entity upon behalf of which the person(~~s~~) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ **(Seal)**

BMP1 ROSALIE A. MISZKIEL
COMM. #2009058
Notary Public-California
SACRAMENTO COUNTY
My Comm. Exp. Feb. 28, 2017 BMP1

Western Surety Company

POWER OF ATTORNEY APPOINTING INDIVIDUAL ATTORNEY-IN-FACT

Know All Men By These Presents, That WESTERN SURETY COMPANY, a South Dakota corporation, is a duly organized and existing corporation having its principal office in the City of Sioux Falls, and State of South Dakota, and that it does by virtue of the signature and seal herein affixed hereby make, constitute and appoint

David Weise, Thomas R Hucik, Lynn Patton, Rosalie A Miszkiel, Nicki Moon, Individually

of Rancho Cordova, CA, its true and lawful Attorney(s)-in-Fact with full power and authority hereby conferred to sign, seal and execute for and on its behalf bonds, undertakings and other obligatory instruments of similar nature

- In Unlimited Amounts -

and to bind it thereby as fully and to the same extent as if such instruments were signed by a duly authorized officer of the corporation and all the acts of said Attorney, pursuant to the authority hereby given, are hereby ratified and confirmed.

This Power of Attorney is made and executed pursuant to and by authority of the By-Law printed on the reverse hereof, duly adopted, as indicated, by the shareholders of the corporation.

In Witness Whereof, WESTERN SURETY COMPANY has caused these presents to be signed by its Vice President and its corporate seal to be hereto affixed on this 12th day of March, 2015.

WESTERN SURETY COMPANY

Paul T. Bruflat, Vice President

State of South Dakota
County of Minnehaha } ss

On this 12th day of March, 2015, before me personally came Paul T. Bruflat, to me known, who, being by me duly sworn, did depose and say: that he resides in the City of Sioux Falls, State of South Dakota; that he is the Vice President of WESTERN SURETY COMPANY described in and which executed the above instrument; that he knows the seal of said corporation; that the seal affixed to the said instrument is such corporate seal; that it was so affixed pursuant to authority given by the Board of Directors of said corporation and that he signed his name thereto pursuant to like authority, and acknowledges same to be the act and deed of said corporation.

My commission expires
June 23, 2015

J. MOHR
NOTARY PUBLIC
SOUTH DAKOTA

J. Mohr, Notary Public

CERTIFICATE

I, L. Nelson, Assistant Secretary of WESTERN SURETY COMPANY do hereby certify that the Power of Attorney hereinabove set forth is still in force, and further certify that the By-Law of the corporation printed on the reverse hereof is still in force. In testimony whereof I have hereunto subscribed my name and affixed the seal of the said corporation this 24th day of June, 2015.

WESTERN SURETY COMPANY

L. Nelson, Assistant Secretary

Form F4280-7-2012

INDIVIDUAL SURETIES WILL NOT BE ACCEPTED

STATUTORY PAYMENT 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)

Bond No: 929615455
Premium: Included in Performance Bond

KNOW ALL MEN BY THESE PRESENTS:

That, VSS International, Inc. (hereinafter called the Principal), as Principal, and * a corporation organized and existing under the laws of the State of South Dakota with its principal office in the City of Sioux Falls, (hereinafter called the Surety), as Surety, are held and firmly bound unto the City of Glendale, a municipal corporation, (hereinafter called the Obligee), in the amount of ** Dollars ($ 883,000.00), 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 Obligee, dated the 9th day of June, 20 15, to construct **PROJECT 141514 - 2014/2015 PAVEMENT MANAGEMENT PROGRAM - SLURRY SEAL 2** which contract is hereby referred to and made a part hereof as fully and to the same extent as if copied at length herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the said Principal shall promptly pay all monies due to all persons supplying labor or materials to him or his subcontractors in the prosecution of the work provided for in said Contract, then this obligation shall be void, otherwise to remain in full force and effect.

PROVIDED, HOWEVER, that this bond having been required of the said Principal in order to comply with the provisions of Title 34, Chapter 2, Article 2, of the Arizona Revised Statutes, all rights and remedies on this bond shall inure solely to such persons and shall be determined in accordance with the provisions, conditions, and limitations of said Title, Chapter and Article, to the same extent as if they 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 24th day of June, 20 15.

VSS International, Inc.
Principal Seal

By _____

Western Surety Company
By _____ Jeff Roberts, C.A.O.
Surety Thomas R. Hucik, Attorney-in-Fact Seal

Wells Fargo Insurance Services
Agency of Record

10940 White Rock Road, 2nd FL
Rancho Cordova, CA 95670
Agency Address

Telephone 916-589-8000

*Western Surety Company
**Eight Hundred Eighty Three Thousand and 00/100

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of Sacramento)

On June 24, 2015 before me, Rosalie A. Miszkiel, Notary Public
(insert name and title of the officer)

personally appeared Thomas R. Hucik,
who proved to me on the basis of satisfactory evidence to be the person(~~s~~) whose name(~~s~~) is/~~are~~ subscribed to the within instrument and acknowledged to me that he/~~she/they~~ executed the same in his/~~her/their~~ authorized capacity(~~ies~~), and that by his/~~her/their~~ signature(~~s~~) on the instrument the person(~~s~~), or the entity upon behalf of which the person(~~s~~) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ **(Seal)**

BMP1 ROSALIE A. MISZKIEL
COMM. #2009058
Notary Public-California
SACRAMENTO COUNTY
My Comm. Exp. Feb. 28, 2017 BMP1

Western Surety Company

POWER OF ATTORNEY APPOINTING INDIVIDUAL ATTORNEY-IN-FACT

Know All Men By These Presents, That WESTERN SURETY COMPANY, a South Dakota corporation, is a duly organized and existing corporation having its principal office in the City of Sioux Falls, and State of South Dakota, and that it does by virtue of the signature and seal herein affixed hereby make, constitute and appoint

David Weise, Thomas R Hucik, Lynn Patton, Rosalie A Miszkiel, Nicki Moon, Individually

of Rancho Cordova, CA, its true and lawful Attorney(s)-in-Fact with full power and authority hereby conferred to sign, seal and execute for and on its behalf bonds, undertakings and other obligatory instruments of similar nature

- In Unlimited Amounts -

and to bind it thereby as fully and to the same extent as if such instruments were signed by a duly authorized officer of the corporation and all the acts of said Attorney, pursuant to the authority hereby given, are hereby ratified and confirmed.

This Power of Attorney is made and executed pursuant to and by authority of the By-Law printed on the reverse hereof, duly adopted, as indicated, by the shareholders of the corporation.

In Witness Whereof, WESTERN SURETY COMPANY has caused these presents to be signed by its Vice President and its corporate seal to be hereto affixed on this 12th day of March, 2015.

WESTERN SURETY COMPANY

Paul T. Bruflat, Vice President

State of South Dakota
County of Minnehaha } ss

On this 12th day of March, 2015, before me personally came Paul T. Bruflat, to me known, who, being by me duly sworn, did depose and say: that he resides in the City of Sioux Falls, State of South Dakota; that he is the Vice President of WESTERN SURETY COMPANY described in and which executed the above instrument; that he knows the seal of said corporation; that the seal affixed to the said instrument is such corporate seal; that it was so affixed pursuant to authority given by the Board of Directors of said corporation and that he signed his name thereto pursuant to like authority, and acknowledges same to be the act and deed of said corporation.

My commission expires
June 23, 2015

J. MOHR
NOTARY PUBLIC
SOUTH DAKOTA

J. Mohr, Notary Public

CERTIFICATE

I, L. Nelson, Assistant Secretary of WESTERN SURETY COMPANY do hereby certify that the Power of Attorney hereinabove set forth is still in force, and further certify that the By-Law of the corporation printed on the reverse hereof is still in force. In testimony whereof I have hereunto subscribed my name and affixed the seal of the said corporation this 24th day of June, 2015.

WESTERN SURETY COMPANY

L. Nelson, Assistant Secretary

Form F4280-7-2012

BASIC-1 OP ID: JV

ACORD CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 06/24/2015

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
Andreini & Company-San Mateo
License 0208825
220 West 20th Ave
San Mateo, CA 94403
Phone: 650-573-1111
Fax: 650-378-4361

CONTACT NAME: Janet MacDougall
PHONE (A/C, No, Ext): 925-242-2619 FAX (A/C, No):
E-MAIL ADDRESS: jmacdougall@andreini.com

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : National Union Fire Ins Co PA	19445
INSURER B : Starr Indemnity & Liability Co	38318
INSURER C : Travelers Property Casualty	36161
INSURER D :	
INSURER E :	
INSURER F :	

INSURED
VSS International, Inc.
3785 Channel Drive
West Sacramento, CA 95691

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 X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR X OCIP Excluded GEN'L AGGREGATE LIMIT APPLIES PER: POLICY X PRO-JECT LOC	X	X	5610628	03/01/2015	03/01/2016	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ $ $ $ $ $	2,000,000 100,000 5,000 2,000,000 4,000,000 4,000,000
A	AUTOMOBILE LIABILITY X ANY AUTO ALL OWNED AUTOS SCHEDULED AUTOS HIRED AUTOS NON-OWNED AUTOS X X OCIP Excl	X	X	6579252	03/01/2015	03/01/2016	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident) MCS 90	$ $ $ $ $	2,000,000 Included
B	UMBRELLA LIAB X OCCUR X EXCESS LIAB CLAIMS-MADE DED RETENTION $			1000021595	03/01/2015	03/01/2016	EACH OCCURRENCE AGGREGATE	$ $	5,000,000 5,000,000
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y/N ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) N/A If yes, describe under DESCRIPTION OF OPERATIONS below						WC STATU-TORY LIMITS OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	 $ $ $	
C	Leased/Rent Equip			QT-630-7444L337-TIL-15	03/01/2015	03/01/2016	Blanket		750,000

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

VSSI Job# 15-049. Project 141514-2014/2015. Pavement Management Program - Slurry Seal 2. The City of Glendale, its officers, agents and employees are additional insured on the General Liability and Auto Liability per endorsements 100983(2/09) and CA20480299. Primary Insurance Wording and Waiver of Subrogation apply to General Liability per endorsement > >

CERTIFICATE HOLDER

GLEGLE6

City of Glendale
Attn: Engineering Department
5850 West Glendale Avenue
Glendale, AZ 85301

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

Janet S MacDougall

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100983(2/09).
Auto Waiver of Subrogation applies per endorsement 62897(6/95).

ENDORSEMENT

This endorsement, effective 12:01 A.M. 03/01/2015 forms a part of

policy No.GL 561-06-28 issued to BASIC RESOURCES, INC.

by NATIONAL UNION FIRE INSURANCE COMPANY OF PITTSBURGH, PA

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

CONTRACTOR'S COMMERCIAL PRIME ENDORSEMENT

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE FORM

Coverage afforded under this endorsement does not apply to any person or organization covered as an additional insured on any other endorsement now or hereafter attached to this Coverage Part.

I. ADDITIONAL INSUREDS

Section II - WHO IS AN INSURED, 1. is amended to include as an insured any person or organization described in paragraphs A through I below, whom you are required to add as an additional insured under a written contract or agreement. The written contract or agreement must be:

1. Currently in effect or becoming effective during the term of this policy; and
2 Executed prior to "bodily injury", "property damage," or "personal injury and advertising injury".

A. BY CONTRACT

Any person or organization to whom you become obligated to include as an additional insured under this policy, as a result of any contract or agreement you enter into which requires you to furnish insurance to that person or organization of the type provided by this policy, but only with respect to liability arising out of your operations or premises owned by or rented to you. However, the insurance provided will not exceed the lesser of:

1. The coverage and/or limits of this policy, or
2. The coverage and/or limits required by said contract or agreement.

B. CONTROLLING INTEREST

1. Any person or organization having a greater than a 50% interest in you, but only with respect to their liability arising out of:
   a. Their financial control of you; or
   b. Premises they own, maintain or control while you lease these premises.
2. The insurance afforded to these additional insureds under Paragraph I.B.1 does not apply to structural alterations, new construction or demolition operations performed by or for that person or organization.

C. CO-OWNER OR INSURED PREMISES

A Co-owner of insured premises co-owned by you and covered by this insurance but only with respect to their liability as co-owner of the premises.

D. LESSOR OF LEASED EQUIPMENT

1. Any person or organization from whom you lease equipment, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by your maintenance, operation or use of such equipment leased to you by such person(s) or organization(s).

2. With respect to the insurance afforded to these additional insureds under Paragraph I.D.1, this insurance does not apply to any "occurrence" which takes place:

    a) after the equipment lease expires, or

    b) after the equipment is returned or no longer in your possession,

    whichever takes place later.

E. MANAGERS OR LESSORS OF PREMISES

Managers or Lessors of premises but only with respect to liability arising out of the ownership, maintenance or use of that part of the premises leased to you and subject to the following additional exclusions:

This insurance under this paragraph does not apply to:

1. Any "occurrence" which takes place after you cease to be a tenant in that premises.

2. Structural alterations, new construction or demolition operations performed by or on behalf of such Managers or Lessors.

F. MORTGAGEE, ASSIGNEE, OR RECEIVER

1. A mortgagee, assignee, or receiver but only with respect to their liability as mortgagee, assignee, or receiver and arising out of the ownership, maintenance, or use of the premises by you.

2. The insurance afforded to the additional insureds under Paragraph I.F.1 does not apply to structural alterations, new construction or demolition operations performed by or for that mortgagee, assignee, or receiver.

G. OWNERS, LESSEES, OR CONTRACTORS - COMPLETED OPERATIONS

(1) Any Owner, Lessee or Contractor, but only with respect to liability arising out of "your work" performed for that additional insured and included in the "products-completed operations hazard".

H. OWNERS, LESSEES, OR CONTRACTORS - ONGOING OPERATIONS

Any Owners, Lessees, or Contractors, but only with respect to liability arising out of your ongoing operations performed for that additional insured.

This insurance does not apply to "bodily injury" or "property damage" occurring after:

(1) 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) has been completed; or,

(2) that portion of "your work" out of which the injury or damage arises 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 a part of the same project.

I. **STATE OR POLITICAL SUBDIVISION - PERMITS**

Any State or Political Subdivision, subject to the following provisions:

1. This insurance applies only with respect to operations performed by you or on your behalf for which the state or political subdivision has issued a permit.
2. This insurance does not apply to:
   a. "Bodily injury," "property damage" or" personal and advertising injury" arising out of operations performed for the state or municipality; or
   b. "Bodily injury" or "property damage" included within the "products-completed operations hazard".

II. **PRIMARY INSURANCE - ADDITIONAL INSUREDS**

Where persons or organizations have been added to your policy as additional insureds to comply with insurance requirements of written contracts mandating primary coverage for such additional insureds relative to:

a) the performance of your ongoing operations for the additional insureds; or

b) "your work" performed for the additional insureds and included in the "products-completed operations hazard,

then with respect to these additional insureds as defined above in this Section only, **SECTION IV - COMMERCIAL GENERAL LIABILITY CONDITIONS, Paragraph 4. - Other Insurance, a. - Primary Insurance,** is deleted in its entirety and replaced with the following:

This insurance is primary over any similar insurance available to any person or organization we have added to this policy as an additional insured to comply with insurance requirements of written contracts mandating primary coverage for such additional insureds relative to (a) the performance of your ongoing operations for the additional insureds, or (b) "your work" performed for the additional insureds and included in the "products-completed operations hazard. However, this insurance is primary over any other similar insurance only if the additional insured is designated as a named insured of the other similar insurance. We will not require contribution of limits from the other similar insurance if the insurance afforded is primary.

III. **INCIDENTAL MEDICAL MALPRACTICE LIABILITY COVERAGE**

SECTION II - WHO IS AN INSURED, 2. a. (1) (d) is deleted in its entirety and replaced with the following:

(d) Arising out of his or her providing or failing to provide professional health care services, except for "bodily injury" arising out of "Incidental Medical Malpractice Injury" by any physician, dentist, nurse or other medical practitioner employed or retained by you unless such "bodily injury" is covered by another primary policy. However, the insurance provided hereunder to such persons will not apply to liability arising out of services performed outside of the scope of their duties as your "employees." Any series of continuous, repeated or related acts will be treated as the occurrence of a single negligent professional healthcare service, which will be assignable to the same policy and policy year in which the originating act occurred.

SECTION V - DEFINITIONS - is amended to add:

"Incidental Medical Malpractice Injury" means "Bodily Injury" arising out of the rendering of or failure to render the following services:

a. medical, surgical, dental, x-ray or nursing service or treatment or the furnishing of food or beverages in connection therewith; or

b. the furnishing or dispensing of drugs or medical, dental or surgical supplies or appliances.

The Coverage provided by this endorsement does not apply to you or any insured if you are engaged in the business or occupation of providing any of the services described in the definition of "Incidental Medical Malpractice Injury".

IV. JOINT VENTURES / PARTNERSHIPS / LIMITED LIABILITY COMPANIES

The paragraph under **SECTION II - WHO IS AN INSURED** which states:

No person or organization is an insured with respect to the conduct of any current or past partnership, joint venture or limited liability company that is not shown as a Named Insured in the Declarations.

is hereby deleted and replaced with the following:

No person or organization, other than you, is an insured with respect to the conduct of any current or past partnership, joint venture or limited liability company that is not shown as a Named Insured in the Declarations.

Coverage under this policy, however, will not apply:

a. Prior to the termination date of any joint venture, partnership or limited liability company; or

b. If there is valid and collectible insurance purchased specifically to insure the partnership, joint venture or limited liability company.

V. SUPPLEMENTARY PAYMENTS

Under **SECTION I - SUPPLEMENTARY PAYMENTS - COVERAGES A AND B**, Paragraph **1.b.**, is deleted in its entirety and replaced with the following:

b. Up to $2,500 for cost of bail bonds required because of accidents or traffic law violations arising out of the use of any vehicle to which the Bodily Injury Liability Coverage applies. We do not have to furnish these bonds.

VI. LIBERALIZATION CLAUSE

If we revise or replace our standard policy form to provide more coverage, your policy will automatically provide the additional coverage as of the day the revision is effective in your state.

VII. UNINTENTIONAL ERRORS AND OMISSIONS

SECTION IV - COMMERCIAL GENERAL LIABILITY CONDITIONS, 6. - Representations is amended by adding:

d. The unintentional failure by you or any Insured to provide accurate and complete nonmaterial representations as of the inception of the policy will not prejudice the coverages afforded by this policy.

VIII. AMENDMENT OF DUTIES IN THE EVENT OF OCCURRENCE, OFFENSE, CLAIM OR SUIT

SECTION IV - COMMERCIAL GENERAL LIABILITY CONDITIONS, 2. - Duties in the Event of Occurrence, Offense, Claim or Suit, a. is hereby deleted and replaced with the following:

a. You must see to it that we are notified as soon as practicable of any "occurrence" or an offense, which may result in a claim. Knowledge of an "occurrence" or an offense by your agent, your servant, or your employee will not in itself constitute knowledge to you unless the Director of Risk Management (or one with similar or equivalent title) or his/her designee will have received such notice. To the extent possible notice should include:

(1) How, when and where the "occurrence" or offense took place;
(2) The names and addresses of any injured persons and witnesses; and
(3) The nature and location of any injury or damage arising out of the "occurrence" or offense.

IX. AMENDMENT OF EXPECTED OR INTENDED INJURY EXCLUSION

SECTION I - COVERAGES, COVERAGE A - BODILY INJURY AND PROPERTY DAMAGE LIABILITY, 2. - Exclusions, a. - Expected or Intended Injury, is deleted and replaced by the following:

a. "Bodily injury" or "property damage" expected or intended from the standpoint of the insured. This exclusion does not apply to "bodily injury" or "property damage" resulting from the use of reasonable force to protect persons or property.

X. CONTRACTUAL LIABILITY - RAILROADS

Only with respect to (i) operations performed within 50 feet of railroad property and (ii) for which a Railroad Protective Liability Policy in the name of the railroad has been provided, then

A. **SECTION V - DEFINITIONS, Paragraph 9,** is deleted in its entirety and replaced with the following:

9. "Insured Contract" means:

a. A contract for a lease of premises. However, that portion of the contract for a lease of premises that indemnifies any person or organization for damage by fire to premises while rented to you or temporarily occupied by you with permission of the owner is not an "insured contract";

b. A sidetrack agreement;

c. Any easement or license agreement;

d. An obligation, as required by ordinance, to indemnify a municipality, except in connection with work for a municipality;

e. An elevator maintenance agreement;

f. That part of any other contract or agreement pertaining to your business (including an indemnification of a municipality in connection with work performed for a municipality) under which you assume the tort liability of another party to pay for "bodily injury" or "property damage" to a third person or organization. Tort liability means a liability that would be imposed by law in the absence of any contract or agreement.

Paragraph **f.** does not include that part of any contract or agreement:

(1) That indemnifies an architect, engineer or surveyor for injury or damage arising out of:

(a) Preparing, approving or failing to prepare or approve maps, shop drawings, opinions, reports, surveys, field orders, change orders or drawings and specifications; or

(b) Giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage; or

(2) Under which the insured, if an architect, engineer or surveyor, assumes liability for an injury or damage arising out of the insured's rendering or failure to render professional services, including those listed in Paragraph (1) above and supervisory, inspection, architectural or engineering activities; and

B. **SECTION IV - COMMERCIAL GENERAL LIABILITY CONDITIONS, 4. - Other Insurance, b. Excess Insurance, (1) (a)**, is amended to include the following:

(v) That is a Railroad Protective Insurance Policy or similar coverage.

XI. COVERAGE FOR YOUR SUPERVISORY OR MANAGERIAL EMPLOYEES RELATING TO CO-EMPLOYEE INJURIES

SECTION II - WHO IS AN INSURED, 2.a. (1), (a) and **(b)** are clarified to hold that:

Your supervisory or managerial "employees" are insureds for "bodily injury" to "co-employees" while in the course of their employment or performing duties related to the conduct of your business if claims or suits arise out of liability assumed by an insured under an "insured contract" as provided by **SECTION I - COVERAGES, COVERAGE A BODILY INJURY AND PROPERTY DAMAGE LIABILITY, 2. Exclusions, e. Employer's Liability.**

XII. WAIVER OF TRANSFER OF RIGHTS OR RECOVERY AGAINST OTHERS TO US

SECTION IV - COMMERCIAL GENERAL LIABILITY CONDITIONS, 8. - Transfer of Rights of Recovery Against Others To Us, is amended by the addition of the following:

We waive any right of recovery we may have against any person or organization pursuant to applicable written contract or agreement you enter into because of payments we make for injury or damage arising out of your ongoing operations or "your work" done under a contract with that person or organization and included in the "products-completed operations hazard".

XIII. AMENDMENT OF OTHER INSURANCE

A. **SECTION IV - COMMERCIAL GENERAL LIABILITY CONDITIONS, 4.- Other Insurance, b. - Excess Insurance, (1),** is amended to include the following:

This insurance shall not be excess where (i) such other insurance is specifically purchased to apply as excess of this policy, or (ii) where you are obligated by contract to provide primary insurance to an additional insured, unless there is other additional insurance coverage available to that additional insured.

B. **SECTION IV - COMMERCIAL GENERAL LIABILITY CONDITIONS, 4.- Other Insurance, b. - Excess Insurance, (2),** is deleted in its entirety and replaced with the following:

When this insurance is excess, we will have no duty under Coverages A or B to defend any claim or "suit" that any other insurer has a duty to defend. If no other insurer defends, we will undertake to do so, but we will be entitled to the insured's rights against all those other insurers.

XIV. AMENDMENT AGGREGATE LIMITS PER PROJECT

A. For all sums which the insured becomes legally obligated to pay as damages caused by "occurrences" under COVERAGE **A** (SECTION I), offense under COVERAGE **B** (SECTION 1) and for all medical expenses caused by accidents under COVERAGE **C** (SECTION I), which can be attributed only to ongoing operations at a single designated construction project:

1. A separate Per Construction Project General Aggregate Limit applies to each construction project, and that limit is equal to the amount of the General Aggregate Limit shown in the Declarations.

2. The Per Construction Project General Aggregate Limit is the most we will pay for the sum of (i) all damages under COVERAGE **A**, except damages because of "bodily injury" or "property damage" included in the "products-completed operations hazard", (ii) all damages under COVERAGE **B** and (iii) all medical expenses under COVERAGE **C** regardless of the number of:

   a. Insureds;

   b. Claims made or "suits" brought; or

   c. Persons or organizations making claims or bringing "suits".

3. Any payments made under COVERAGE **A** or **B** for damages or under COVERAGE **C** for medical expenses shall reduce the Per Construction Project General Aggregate Limit for that construction project. Such payments shall not reduce the General Aggregate Limit shown in the Declarations nor shall they reduce any other Per Construction Project General Aggregate Limit for any other construction project covered under this policy.

4. The limits shown in the Declarations for Each Occurrence, Fire Damage and Medical Expense continue to apply. However, instead of being subject to the General Aggregate Limit shown in the Declarations, such limits will be subject to the applicable Per Construction Project General Aggregate Limit.

B. For all sums which the insured becomes legally obligated to pay as damages caused by "occurrences" under COVERAGE **A** (SECTION **I**), offenses under COVERAGE **B** (SECTION 1) and for all medical expenses caused by accidents under COVERAGE **C** (SECTION **I**), which cannot be attributed only to ongoing operations at a single construction project:

1. Any payments made under COVERAGE **A** or **B** for damages or under COVERAGE **C** for medical expenses shall reduce the amount available under the General Aggregate Limit or the Products-Completed Operations Aggregate Limit, whichever is applicable; and

2. Such payments shall not reduce any Construction Project General Aggregate Limit.

C. When coverage for liability arising out of the "products-completed operations hazard" is provided, any payments for damages because of "bodily injury" or "property damage" included in the "products-completed operations hazard" will reduce the Products-Completed Operations Aggregate Limit, and not reduce the General Aggregate Limit nor the Construction Project General Aggregate Limit.

D. If the applicable construction project has been abandoned, delayed, or abandoned and then restarted, or if the authorized contracting parties deviate from plans, blueprints, designs, specifications or timetables, the project will still be deemed to be the same construction project.

E. The provisions of Limits of Insurance (SECTION **III**) not otherwise modified by this endorsement shall continue to apply as stipulated.

Authorized Representative or Countersignature (in States Where Applicable)

POLICY NUMBER: CA 657-92-52

COMMERCIAL AUTO
CA 20 48 02 99

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

DESIGNATED INSURED

This endorsement modifies insurance provided under the following:

BUSINESS AUTO COVERAGE FORM
GARAGE COVERAGE FORM
MOTOR CARRIER COVERAGE FORM
TRUCKERS COVERAGE FORM

With respect to coverage provided by this endorsement, the provisions of the Coverage Form apply unless modified by this endorsement.

This endorsement identifies person(s) or organization(s) who are "insureds" under the Who Is An Insured Provision of the Coverage Form. This endorsement does not alter coverage provided in the Coverage Form.

This endorsement changes the policy effective on the inception date of the policy unless another date is indicated below.

Endorsement Effective: 03/01/2015	Countersigned By:
Named Insured: **BASIC RESOURCES, INC.**	(Authorized Representative)

SCHEDULE

Name of Person(s) or Organization(s):
ANY PERSON OR ORGANIZATION WHOM YOU BECOME OBLIGATED TO INCLUDE AS AN ADDITIONAL INSURED AS A RESULT OF ANY WRITTEN CONTRACT OR AGREEMENT YOU HAVE ENTERED INTO

(If no entry appears above, information required to complete this endorsement will be shown in the Declarations as applicable to the endorsement.)

Each person or organization shown in the Schedule is an "insured" for Liability Coverage, but only to the extent that person or organization qualifies as an "insured" under the Who Is An Insured Provision contained in **Section II** of the Coverage Form.

ENDORSEMENT

This endorsement, effective 12:01 A.M. 03/01/2015 forms a part of

policy No. CA 657-92-52 issued to BASIC RESOURCES, INC.

by NATIONAL UNION FIRE INSURANCE COMPANY OF PITTSBURGH, PA

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

WAIVER OF TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US

This endorsement modifies insurance provided under the following:

BUSINESS AUTO COVERAGE FORM

Section IV - Business Auto Conditions, A. - Loss Conditions, 5. - Transfer of Rights of Recovery Against Others to Us, is amended to add:

However, we will waive any right of recover we have against any person or organization with whom you have entered into a contract or agreement because of payments we make under this Coverage Form arising out of an "accident" or "loss" if:

(1) The "accident" or "loss" is due to operations undertaken in accordance with the contract existing between you and such person or organization; and

(2) The contract or agreement was entered into prior to any "accident" or "loss".

No waiver of the right of recovery will directly or indirectly apply to your employees or employees of the person or organization, and we reserve our rights or lien to be reimbursed from any recovery funds obtained by any injured employee.

AUTHORIZED REPRESENTATIVE

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 06/22/2015

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
CopperPoint Mutual and its subsidiaries
3030 N. 3rd Street
Phoenix AZ 85012-3068

CONTACT NAME: CopperPoint Mutual
PHONE (A/C, No, Ext): 602.631.2600 or 866.284.2694 **FAX (A/C, No):** 602.631.2599
E-MAIL ADDRESS:

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : CopperPoint General Insurance Company	13043
INSURER B :	
INSURER C :	
INSURER D :	
INSURER E :	
INSURER F :	

INSURED
VSS International Inc
PO Box 3191
Modesto CA 95354

COVERAGES **CERTIFICATE NUMBER:** 190 **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 INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
	COMMERCIAL GENERAL LIABILITY						EACH OCCURRENCE	$
	☐ CLAIMS-MADE ☐ OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence)	$
							MED EXP (Any one person)	$
							PERSONAL & ADV INJURY	$
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	$
	☐ POLICY ☐ PRO-JECT ☐ LOC						PRODUCTS - COMP/OP AGG	$
	OTHER:							$
	AUTOMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)	$
	☐ ANY AUTO						BODILY INJURY (Per person)	$
	☐ ALL OWNED AUTOS ☐ SCHEDULED AUTOS						BODILY INJURY (Per accident)	$
	☐ HIRED AUTOS ☐ NON-OWNED AUTOS						PROPERTY DAMAGE (Per accident)	$
								$
	☐ UMBRELLA LIAB ☐ OCCUR						EACH OCCURRENCE	$
	☐ EXCESS LIAB ☐ CLAIMS-MADE						AGGREGATE	$
	☐ DED ☐ RETENTION $							$
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y/N ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? ☐ N/A (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N/A	X	1011823	01/01/2015	01/01/2016	☒ PER STATUTE ☐ OTH-ER	
							E.L. EACH ACCIDENT	$ 1,000,000
							E.L. DISEASE - EA EMPLOYEE	$ 1,000,000
							E.L. DISEASE - POLICY LIMIT	$ 1,000,000

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

Job #: 15-049 Location: Glendale Arizona

6506-STREET OR ROAD CONST: PAV / REPAV

CERTIFICATE HOLDER

City of Glendale
ATTN: Engineering Department
5850 West Glendale Ave
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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CITY OF GLENDALE, ARIZONA
PUBLIC WORKS/ENGINEERING DEPARTMENT

CONTRACTOR'S AFFIDAVIT
REGARDING
SETTLEMENT OF CLAIMS

PROJECT 141514 - 2014/2015 PAVEMENT MANAGEMENT PROGRAM - SLURRY SEAL 2

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: Project includes coverage of approximately 10.5 road miles, utilizing TYPE 2 Slurry Seal, and all associated work such as repair of damaged asphalt, crack seal, traffic control, striping removal/replacement, ancillary concrete repair, etc.

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 will be made at the contract lump sum price fully complete and considered incidental to the work.

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. 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.

9. AZPDES Permit Requirements:

A. 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 appertaining 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.

10. 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.

11. CONSTRUCTION MATERIALS SAMPLING AND TESTING: 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 preformed 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.

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. CONSTRUCTION SIGN: The project type to be indicated on the sign shall be 141514 - 2014/2015 PAVEMENT MANAGEMENT PROGRAM - SLURRY SEAL 2 . The sign shall be movable/mobile to be utilized at various locations during project.

13. 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 $50,000.00. 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 $50,000.00 on the bid form, under line item ALLOWANCE FOR CONSTRUCTION CONTINGENCY.

END OF SPECIAL PROVISIONS

Project Life Cycle Cash Flow Schedule

GLENDALE

Project No.: 0 Date:

Project Name: 0

Company Name: 0

Project Start Date: 0 Project Completion Date

Original ☐ Updated ☐ Revised ☐

		Estimated		Actual	
Qtr.	Fiscal Yr.	Amount	Accum.	Amount	Accum.
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	$ -	$ -		
1st	07/16 - 09/16	$ -	$ -	$ -	$ -
2nd	10/16 - 12/16				
3rd	01/17- 03/17				
4th	04/17 06/17				
1st	07/17 - 09/17				
2nd	10/17 - 12/17				
3rd	01/18- 03/18	$ -	$ -	$ -	$ -
4th	04/18- 06/18				
	Totals	$ -		$ -	$ -

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

For Engineering Use Only:

Account No: _____ PO No. _____

TECHNICAL SPECIFICATIONS

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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 install temporary "no parking" signs along all streets scheduled to receive slurry treatment at 100' on center spacing a minimum of 48 hrs prior to start of slurry operations.

6.1.18. 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

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.

6.1.19. 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.

6.1.20. 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.

6.1.21. The Contractor shall maintain emergency vehicle access at all times.

6.1.22. 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.

6.1.23. 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.

6.1.24. 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.

6.1.25. 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 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. 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 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), ½ inch (12.5mm), ¾ 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"
½"	1.5"	2.0"
¾"	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 applying the sealant, the cracks shall be thoroughly cleaned of loose particles, dust, vegetation, and other substances by means of high velocity, compressed air, with enclosed vacuum type system that is PM-10 compliant or by other methods approved by the engineer. All cracks to be sealed shall be cleaned to a minimum depth of (1) one inch to (1 ½) one and one half inches. The engineer shall make the final determinations as to what work will be done under this contract.

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 that 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 that 40°F (4°C), extreme care should be used to insure that cracks or joints are dry and free from ice and other contaminates. 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-Ih or PMCQS-Ih 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-µm)	30-50
No. 50 (300-µm)	18-30
No. 100 (150-µm)	10-21
No. 200 (75-µm)	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-I0 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 ^{O}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 will be required to coordinate with the City's Public Relations Consultant for notifying residents and businesses of any street restrictions that will affect access to their property. The Contractor will provide scheduling and schedule updates to the Public Relations Consultant in such a timely manner as to allow a minimum of 48 hours advance notice of construction activity and street restrictions. For Monday work residents and businesses shall be notified the preceding Thursday. For Tuesday work ,residents and businesses shall be notified the preceding Friday. Re-notification shall be a minimum of 24 hours in advance.

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.
d. List of roadway segments completed 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 manhole covers, valve box covers, sidewalks, gutters, and intersections, shall have slurry seal removed as specified by the City. The Contractor shall sweep, with PM-I0 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.

The 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.

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 YELLOW STRIPE (90 MIL THERMOPLASTIC) 4" EQUIVALENT
ITEM 16 RAISED PAVEMENT MARKER (TYPE D/G)
ITEM 17 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 st art 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 18 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 19 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 20 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 21 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 22 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 23 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 24 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 25 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

PART C: BID ALTERNATIVES

ITEM BA1 CONSTRUCTION MATERIALS SAMPLING AND TESTING (PER SPECIAL PROVISIONS ITEM 11)

General:

This item includes a lump sum contingency allowance for the sole purpose of reimbursing Contractor for construction materials sampling and testing.

Construction Requirements

All sampling and testing shall be accordance with special provisions item 11.

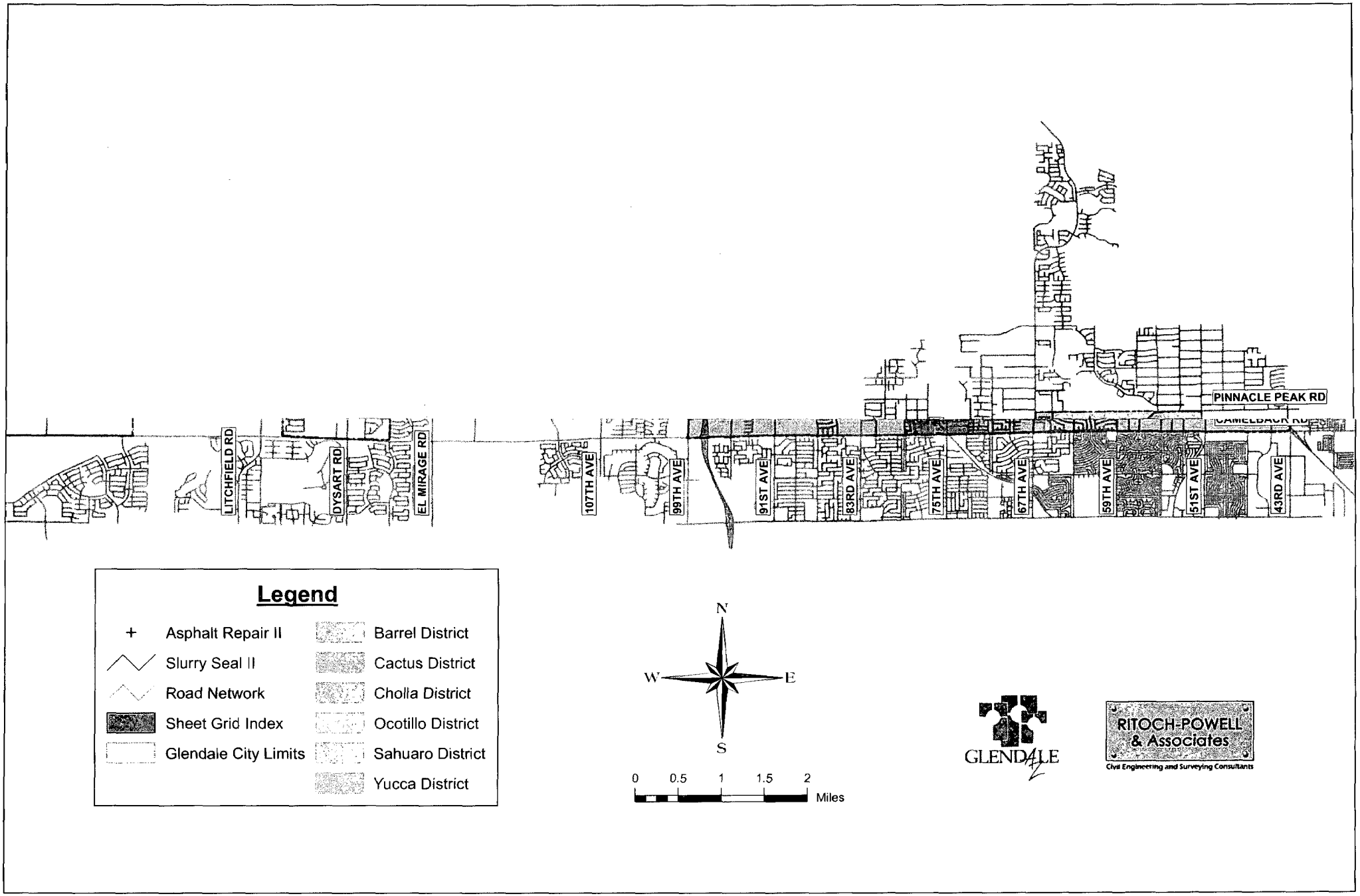
Measurement and Payment:

Construction materials sampling and testing 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 construction materials sampling and testing.

APPENDIX A

IMPROVEMENT OVERVIEW MAP

Surface Treatment Phase II



APPENDIX B

IMPROVEMENT EXHIBITS

IMPROVEMENT EXHIBIT

NORTH

MATCH LINE TO EXHIBIT #3

Feet

0 375 750

EXHIBIT 1 of 41

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.

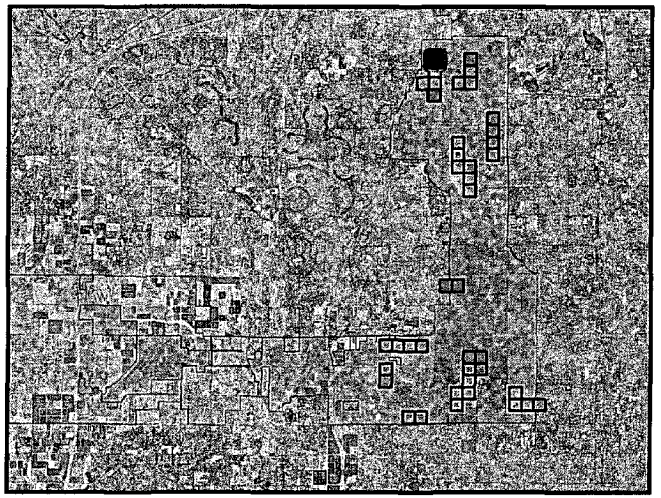
Legend

- ASPHALT_REPAIR_II
- SLURRY_SEAL_II
- CRACK_SEAL_II
- Sheet Grid Index

Council Districts

- BARREL
- CACTUS
- CHOLLA
- OCOTILLO
- SAHUARO
- YUCCA

VICINITY MAP



Prepared For:

GLENDALE

Prepared By:

RITOCH-POWELL & Associates

Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

NORTH

MATCH LINE TO EXHIBIT #4

Feet

0 375 750

EXHIBIT 2 of 41

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.

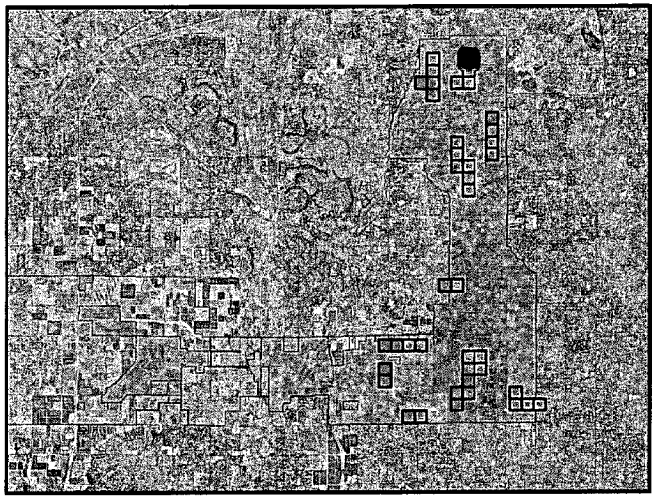
Legend

- ASPHALT_REPAIR_II
- SLURRY_SEAL_II
- CRACK_SEAL_II
- Sheet Grid Index

Council Districts

- BARREL
- CACTUS
- CHOLLA
- OCOTILLO
- SAHUARO
- YUCCA

VICINITY MAP



Prepared For:

GLENDALE

Prepared By:

RITOCH-POWELL & Associates

Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

NORTH

MATCH LINE TO EXHIBIT #1

MATCH LINE TO EXHIBIT #6

Feet

0 375 750

EXHIBIT 3 of 41

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.

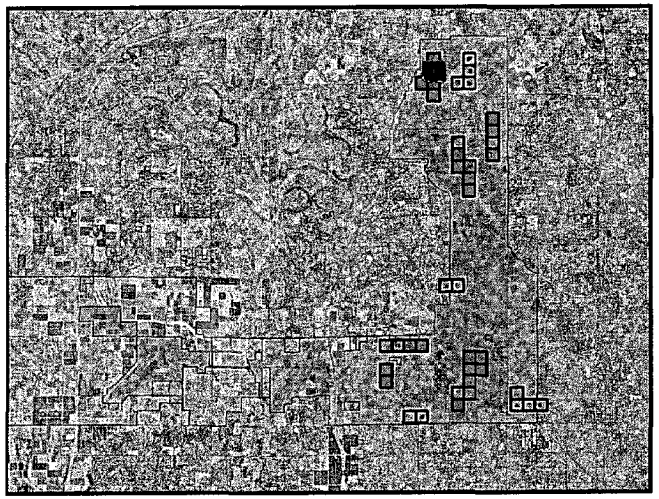
Legend

- ASPHALT_REPAIR_II
- SLURRY_SEAL_II
- CRACK_SEAL_II
- Sheet Grid Index

Council Districts

- BARREL
- CACTUS
- CHOLLA
- OCOTILLO
- SAHUARO
- YUCCA

VICINITY MAP



Prepared For:

GLENDALE

Prepared By:

RITOCH-POWELL & Associates

Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

NORTH

MATCH LINE TO EXHIBIT #2

MATCH LINE TO EXHIBIT #8

Feet

0 375 750

EXHIBIT 4 of 41

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.

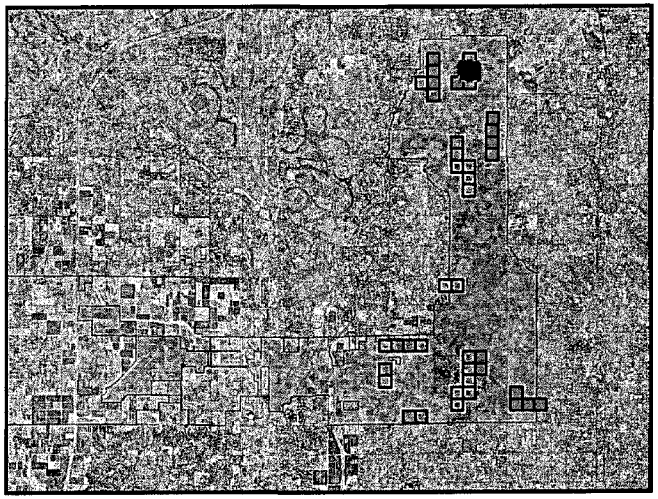
Legend

- ASPHALT_REPAIR_II
- SLURRY_SEAL_II
- CRACK_SEAL_II
- Sheet Grid Index

Council Districts

- BARREL
- CACTUS
- CHOLLA
- OCOTILLO
- SAHUARO
- YUCCA

VICINITY MAP



Prepared For:

GLENDALE

Prepared By:

RITOCH-POWELL & Associates

Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

NORTH

MATCH LINE TO EXHIBIT #6

Feet

0 375 750

EXHIBIT 5 of 41

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.

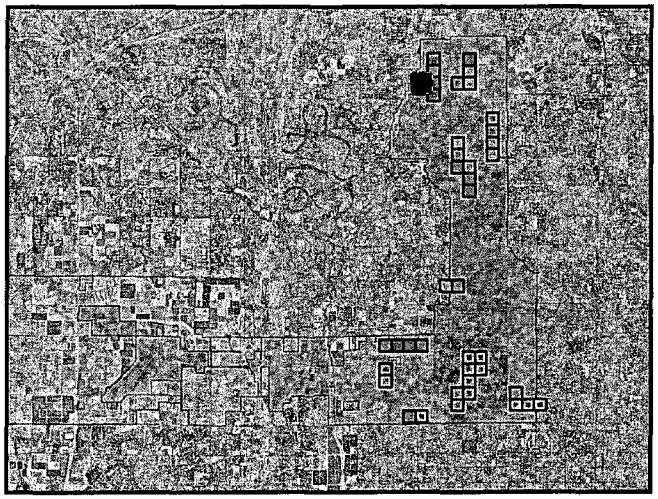
Legend

- ASPHALT_REPAIR_II
- SLURRY_SEAL_II
- CRACK_SEAL_II
- Sheet Grid Index

Council Districts

- BARREL
- CACTUS
- CHOLLA
- OCOTILLO
- SAHUARO
- YUCCA

VICINITY MAP



Prepared For:

GLENDALE AZ

Prepared By:

RITOCH-POWELL & Associates

Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

NORTH

MATCH LINE TO EXHIBIT #3

MATCH LINE TO EXHIBIT #5

MATCH LINE TO EXHIBIT #9

Feet

0 375 750

EXHIBIT 6 of 41

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.

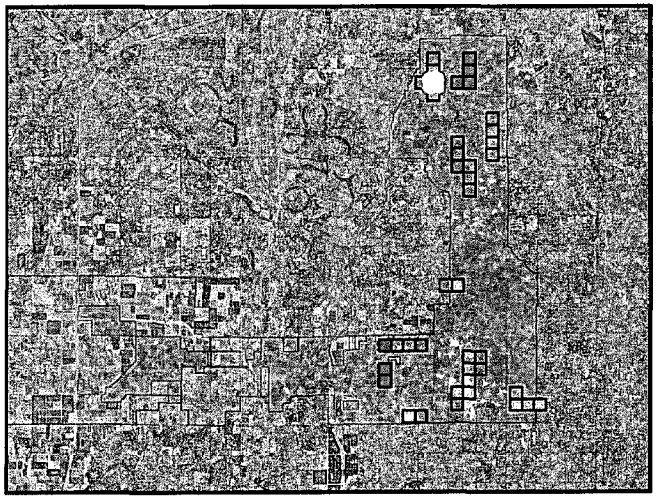
Legend

- ASPHALT_REPAIR_II
- SLURRY_SEAL_II
- CRACK_SEAL_II
- Sheet Grid Index

Council Districts

- BARREL
- CACTUS
- CHOLLA
- OCOTILLO
- SAHUARO
- YUCCA

VICINITY MAP



Prepared For:

GLENDALE

Prepared By:

RITOCH-POWELL & Associates

Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

NORTH

MATCH LINE TO EXHIBIT #8

Feet

0 375 750

EXHIBIT 7 of 41

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

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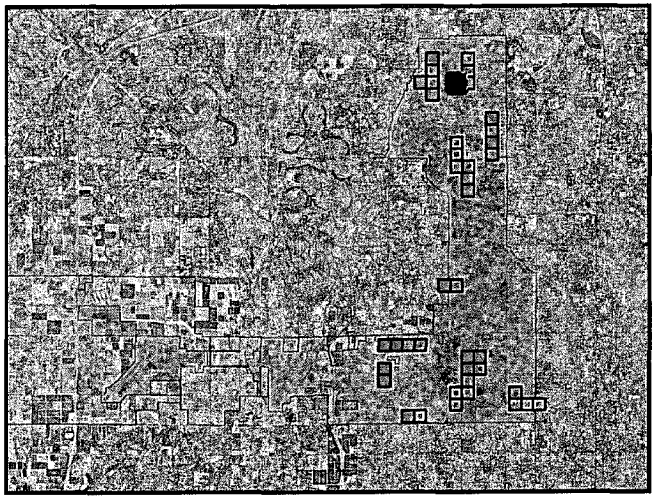
- Sheet Grid Index

Council Districts

- BARREL
- CACTUS
- CHOLLA
- OCOTILLO
- SAHUARO
- YUCCA

VICINITY MAP



Prepared For:

GLENDALE

Prepared By:

RITOCH-POWELL & Associates

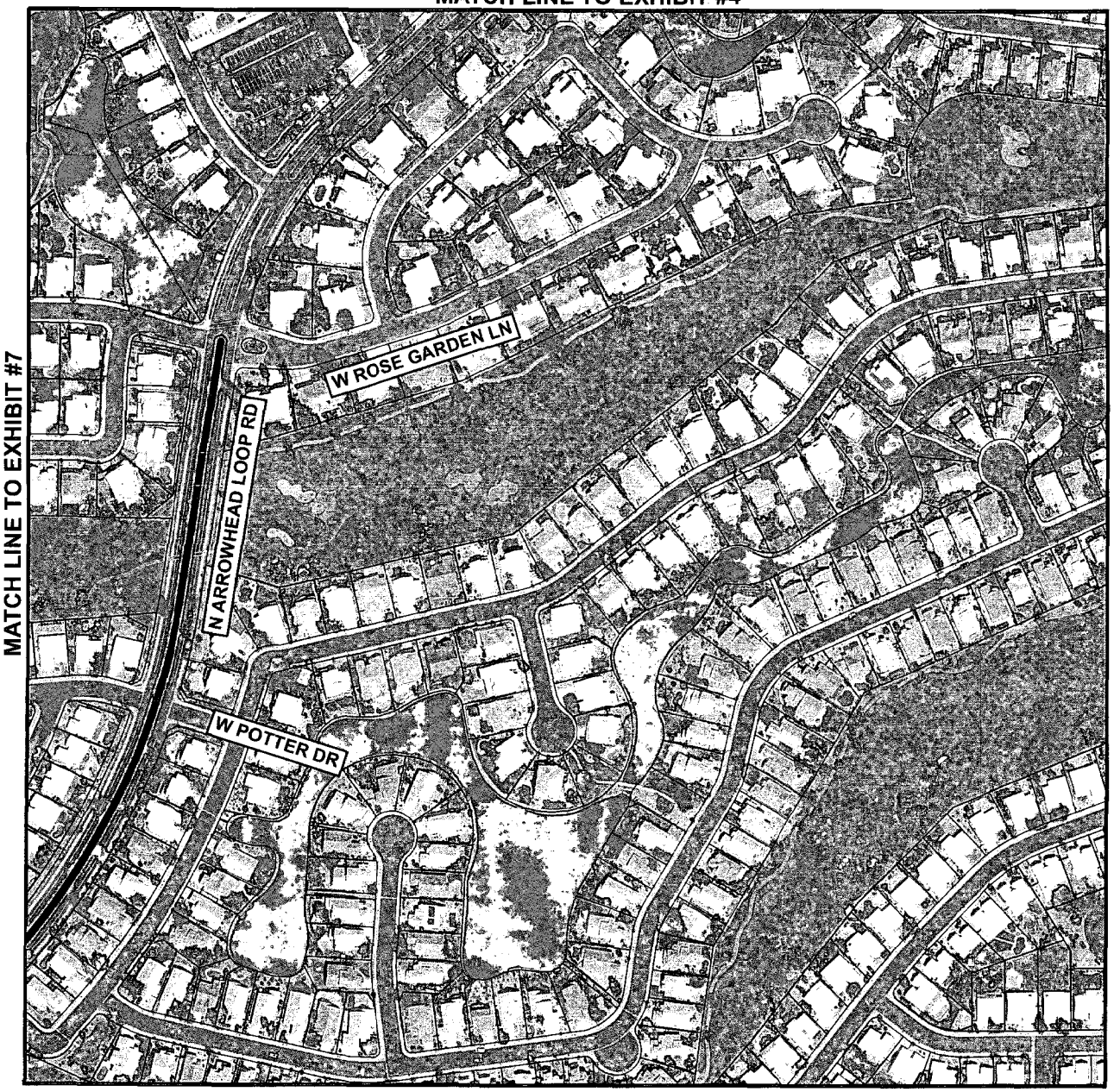
Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

NORTH

MATCH LINE TO EXHIBIT #4

MATCH LINE TO EXHIBIT #7



Feet

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EXHIBIT 8 of 41

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.

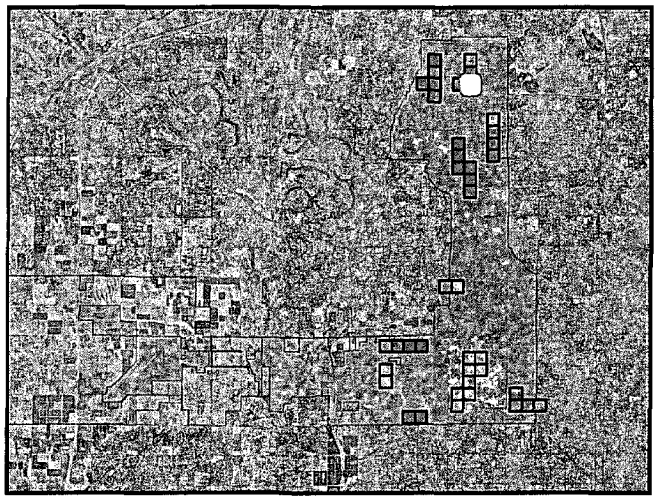
Legend

- ASPHALT_REPAIR_II
- SLURRY_SEAL_II
- CRACK_SEAL_II
- Sheet Grid Index

Council Districts

- BARREL
- CACTUS
- CHOLLA
- OCOTILLO
- SAHUARO
- YUCCA

VICINITY MAP



Prepared For:

GLENDALE

Prepared By:

RITOCH-POWELL & Associates

Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

NORTH

MATCH LINE TO EXHIBIT #6

Feet

0 375 750

EXHIBIT 9 of 41

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.

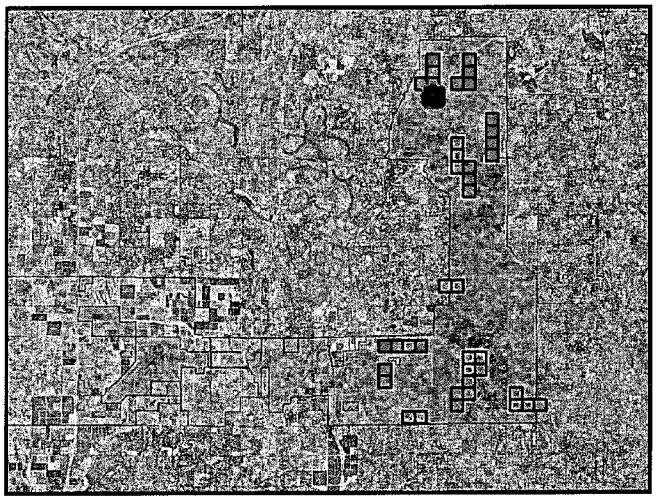
Legend

- ASPHALT_REPAIR_II
- SLURRY_SEAL_II
- CRACK_SEAL_II
- Sheet Grid Index

Council Districts

- BARREL
- CACTUS
- CHOLLA
- OCOTILLO
- SAHUARO
- YUCCA

VICINITY MAP



Prepared For:

GLENDALE

Prepared By:

RITOCH-POWELL & Associates

Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

NORTH

MATCH LINE TO EXHIBIT #11

Feet

0 375 750

EXHIBIT 10 of 41

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.

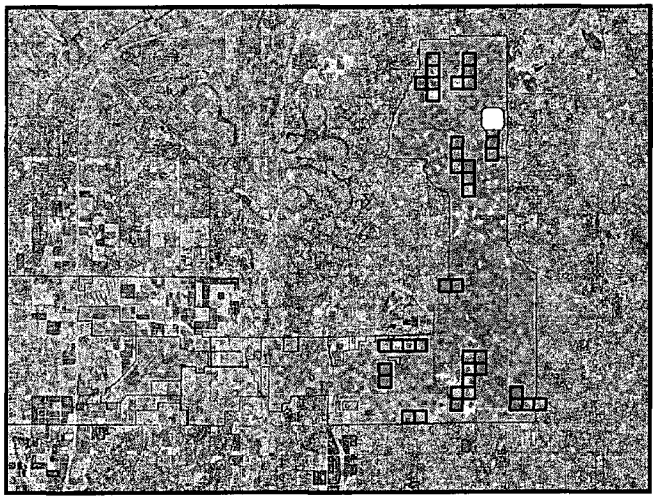
Legend

- ASPHALT_REPAIR_II
- SLURRY_SEAL_II
- CRACK_SEAL_II
- Sheet Grid Index

Council Districts

- BARREL
- CACTUS
- CHOLLA
- OCOTILLO
- SAHUARO
- YUCCA

VICINITY MAP



Prepared For:

GLENDALE

Prepared By:

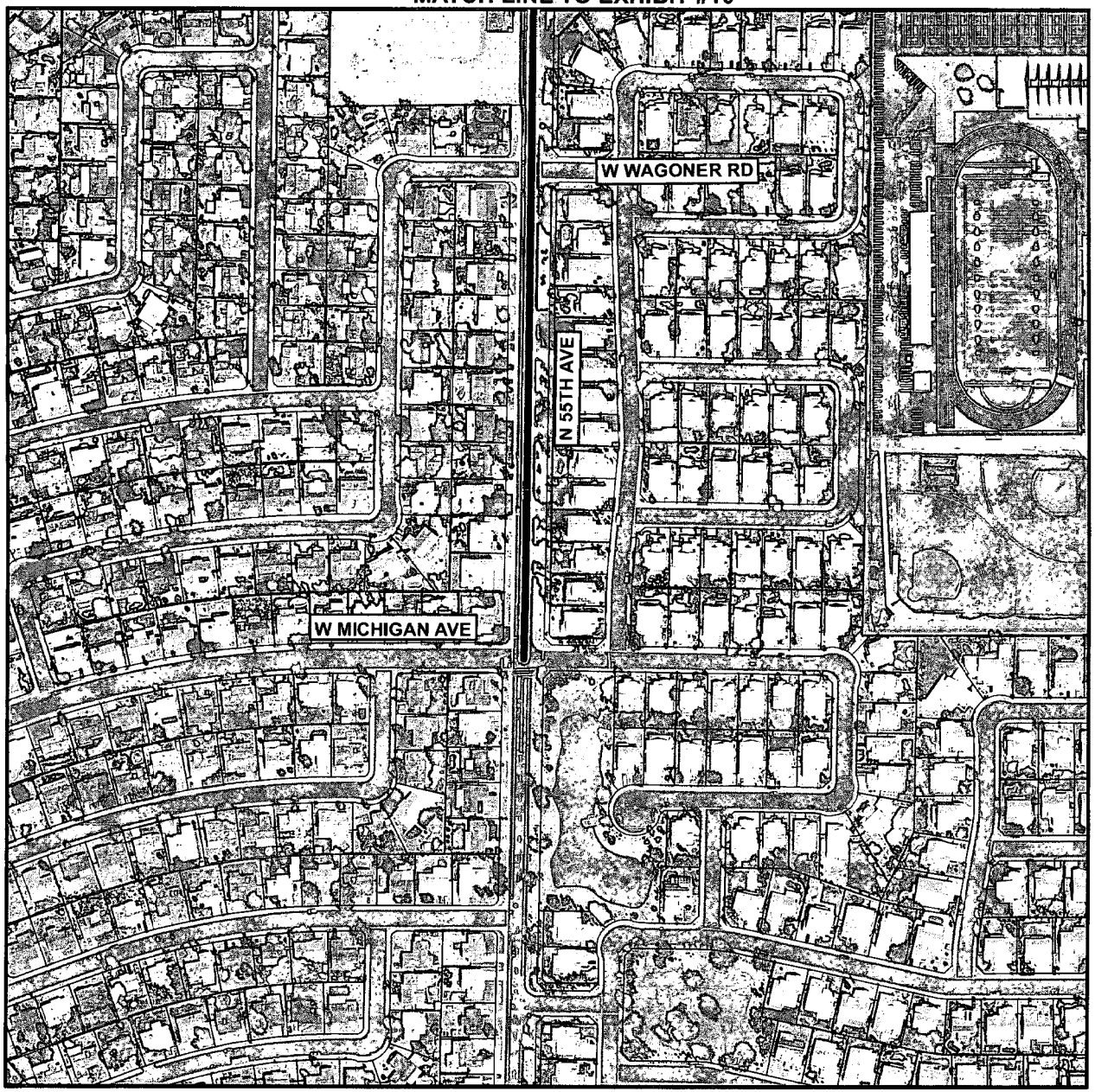
RITOCH-POWELL & Associates

Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

NORTH

MATCH LINE TO EXHIBIT #10



MATCH LINE TO EXHIBIT #13

Feet

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EXHIBIT 11 of 41

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.

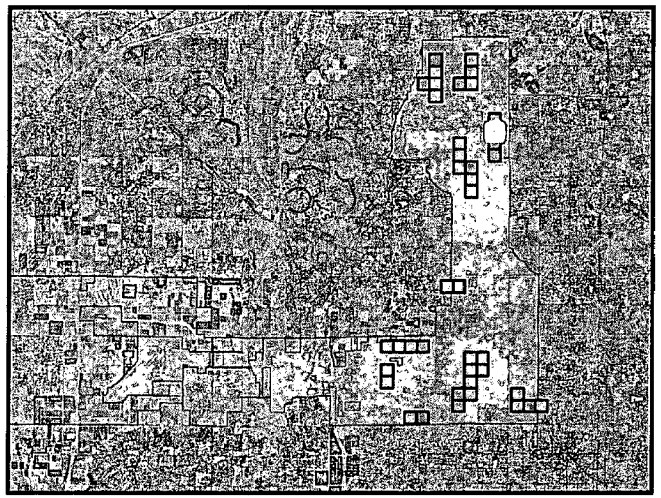
Legend

- ASPHALT_REPAIR_II
- SLURRY_SEAL_II
- CRACK_SEAL_II
- Sheet Grid Index

Council Districts

- BARREL
- CACTUS
- CHOLLA
- OCOTILLO
- SAHUARO
- YUCCA

VICINITY MAP



Prepared For:

GLENDALE

Prepared By:

RITOCH-POWELL & Associates

Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

NORTH

MATCH LINE TO EXHIBIT #14

Feet

0 375 750

EXHIBIT 12 of 41

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.

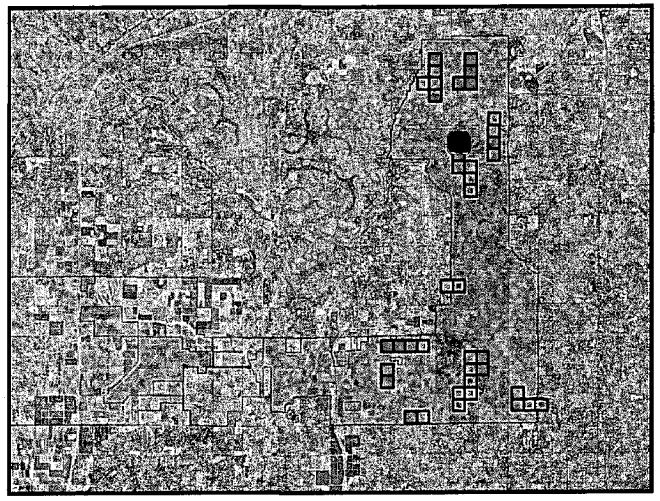
Legend

- ASPHALT_REPAIR_II
- SLURRY_SEAL_II
- CRACK_SEAL_II
- Sheet Grid Index

Council Districts

- BARREL
- CACTUS
- CHOLLA
- OCOTILLO
- SAHUARO
- YUCCA

VICINITY MAP



Prepared For:

GLENDALE

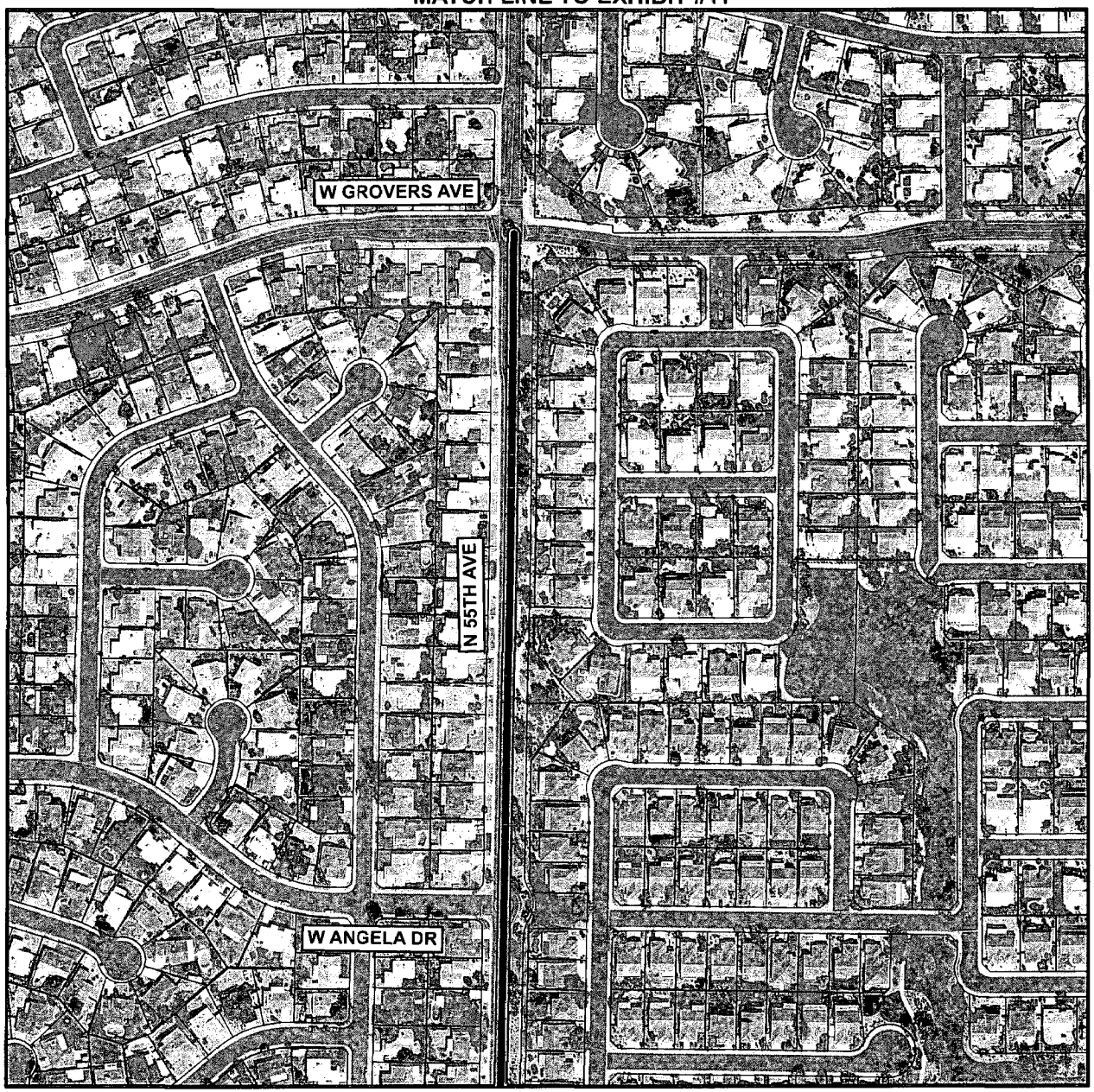
Prepared By:

RITOCH-POWELL & Associates
Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

NORTH

MATCH LINE TO EXHIBIT #11



MATCH LINE TO EXHIBIT #15

Feet

0 375 750

EXHIBIT 13 of 41

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.

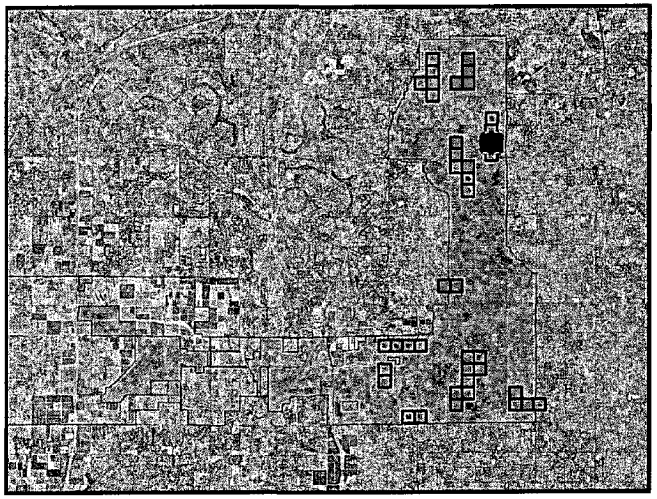
Legend

- ASPHALT_REPAIR_II
- SLURRY_SEAL_II
- CRACK_SEAL_II
- Sheet Grid Index

Council Districts

- BARREL
- CACTUS
- CHOLLA
- OCOTILLO
- SAHUARO
- YUCCA

VICINITY MAP



Prepared For:

GLENDALE

Prepared By:

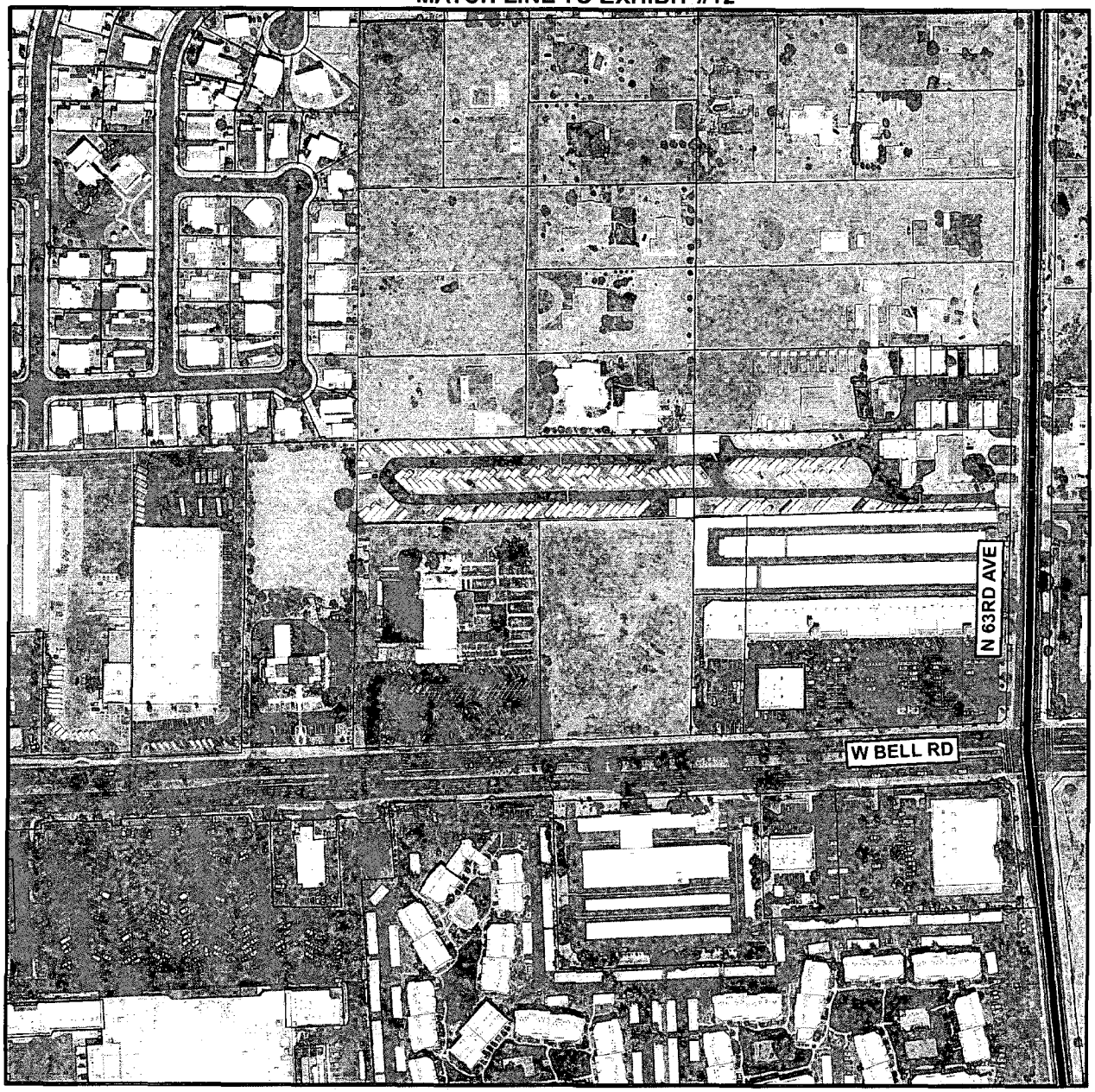
RITOCH-POWELL & Associates

Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

NORTH

MATCH LINE TO EXHIBIT #12



MATCH LINE TO EXHIBIT #16

Feet

0 375 750

EXHIBIT 14 of 41

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.

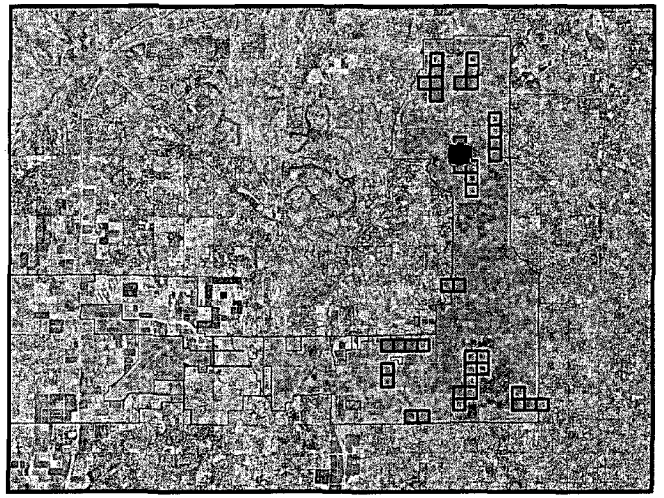
Legend

- ASPHALT_REPAIR_II
- SLURRY_SEAL_II
- CRACK_SEAL_II
- Sheet Grid Index

Council Districts

- BARREL
- CACTUS
- CHOLLA
- OCOTILLO
- SAHUARO
- YUCCA

VICINITY MAP



Prepared For:

GLENDALE

Prepared By:

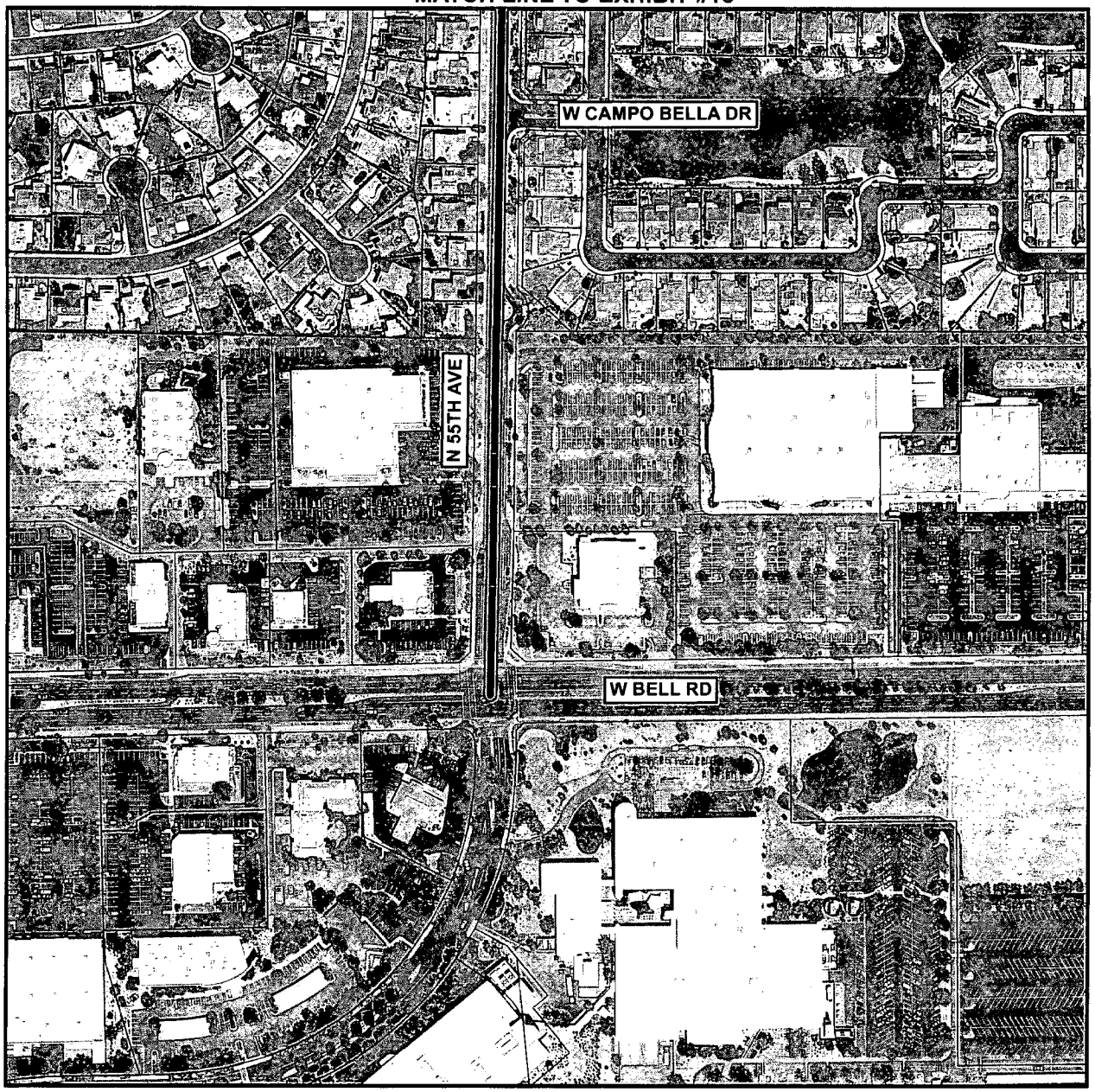
RITOCH-POWELL & Associates

Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

NORTH

MATCH LINE TO EXHIBIT #13



Feet

0 375 750

EXHIBIT 15 of 41

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.

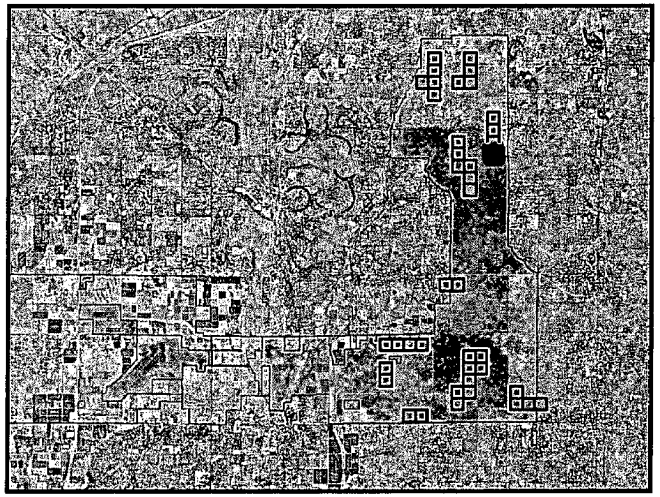
Legend

- ASPHALT_REPAIR_II
- SLURRY_SEAL_II
- CRACK_SEAL_II
- Sheet Grid Index

Council Districts

- BARREL
- CACTUS
- CHOLLA
- OCOTILLO
- SAHUARO
- YUCCA

VICINITY MAP



Prepared For:

GLENDALE

Prepared By:

RITOCH-POWELL & Associates

Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

NORTH

MATCH LINE TO EXHIBIT #14

MATCH LINE TO EXHIBIT #17

Feet

0 375 750

EXHIBIT 16 of 41

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.

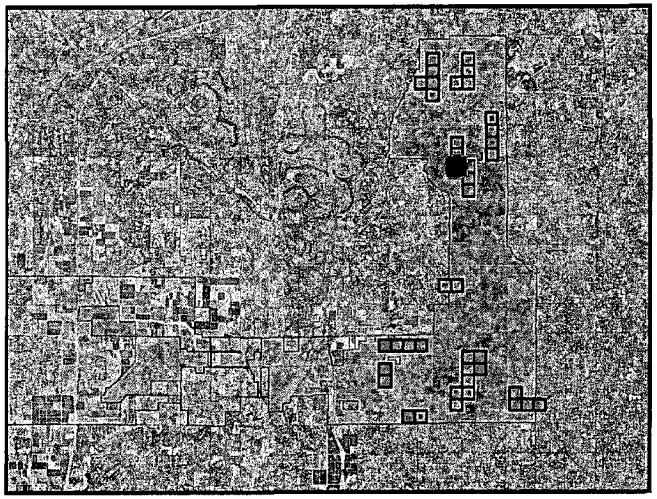
Legend

- ASPHALT_REPAIR_II
- SLURRY_SEAL_II
- CRACK_SEAL_II
- Sheet Grid Index

Council Districts

- BARREL
- CACTUS
- CHOLLA
- OCOTILLO
- SAHUARO
- YUCCA

VICINITY MAP



Prepared For:

GLENDALE

Prepared By:

RITOCH-POWELL & Associates

Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

NORTH

MATCH LINE TO EXHIBIT #16

MATCH LINE TO EXHIBIT #18

Feet

0 375 750

EXHIBIT 17 of 41

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

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- Sheet Grid Index

Council Districts

- BARREL
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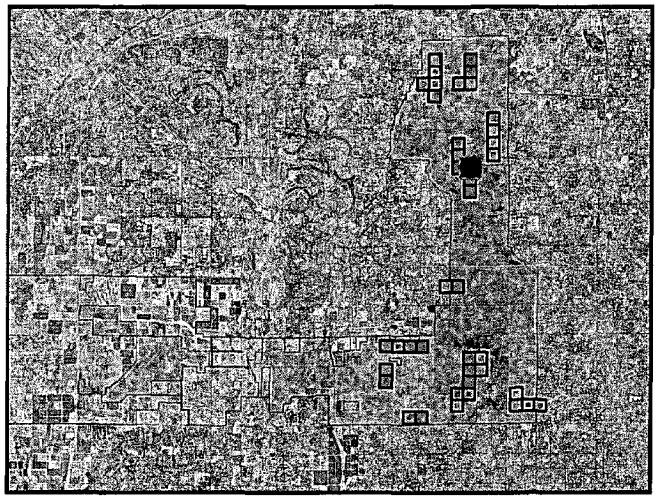
- CHOLLA
- OCOTILLO
- SAHUARO
- YUCCA

VICINITY MAP



Prepared For:

GLENDALE

Prepared By:

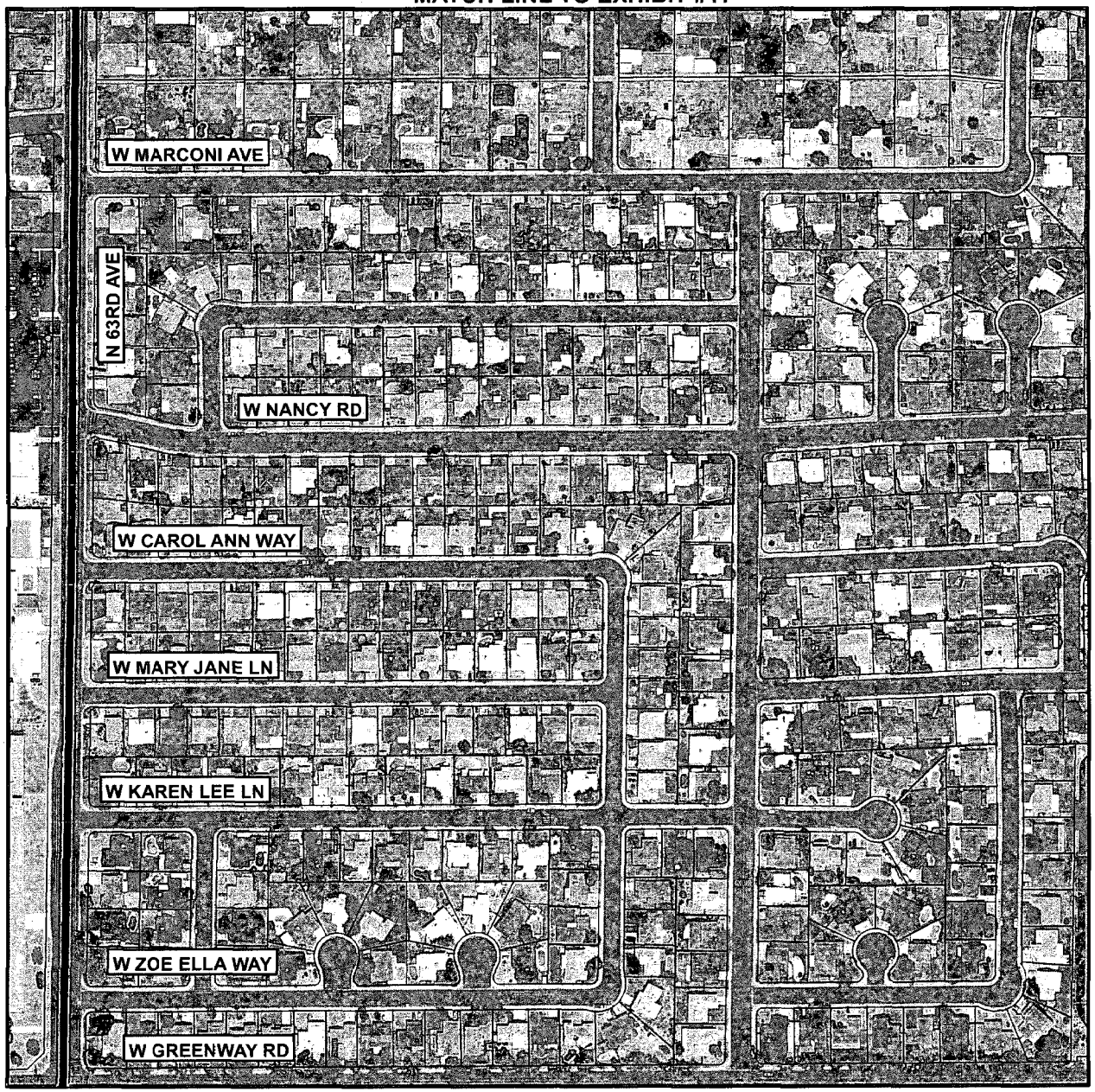
RITOCH-POWELL & Associates

Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

NORTH

MATCH LINE TO EXHIBIT #17



MATCH LINE TO EXHIBIT #19

Feet

0 375 750

EXHIBIT 18 of 41

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.

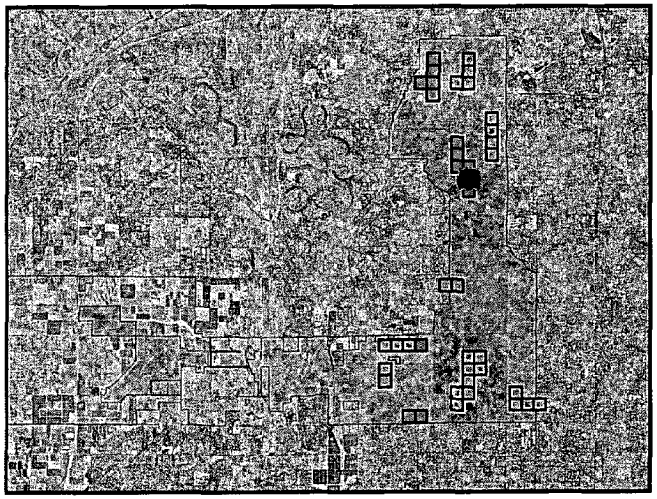
Legend

- ASPHALT_REPAIR_II
- SLURRY_SEAL_II
- CRACK_SEAL_II
- Sheet Grid Index

Council Districts

- BARREL
- CACTUS
- CHOLLA
- OCOTILLO
- SAHUARO
- YUCCA

VICINITY MAP



Prepared For:

GLENDALE

Prepared By:

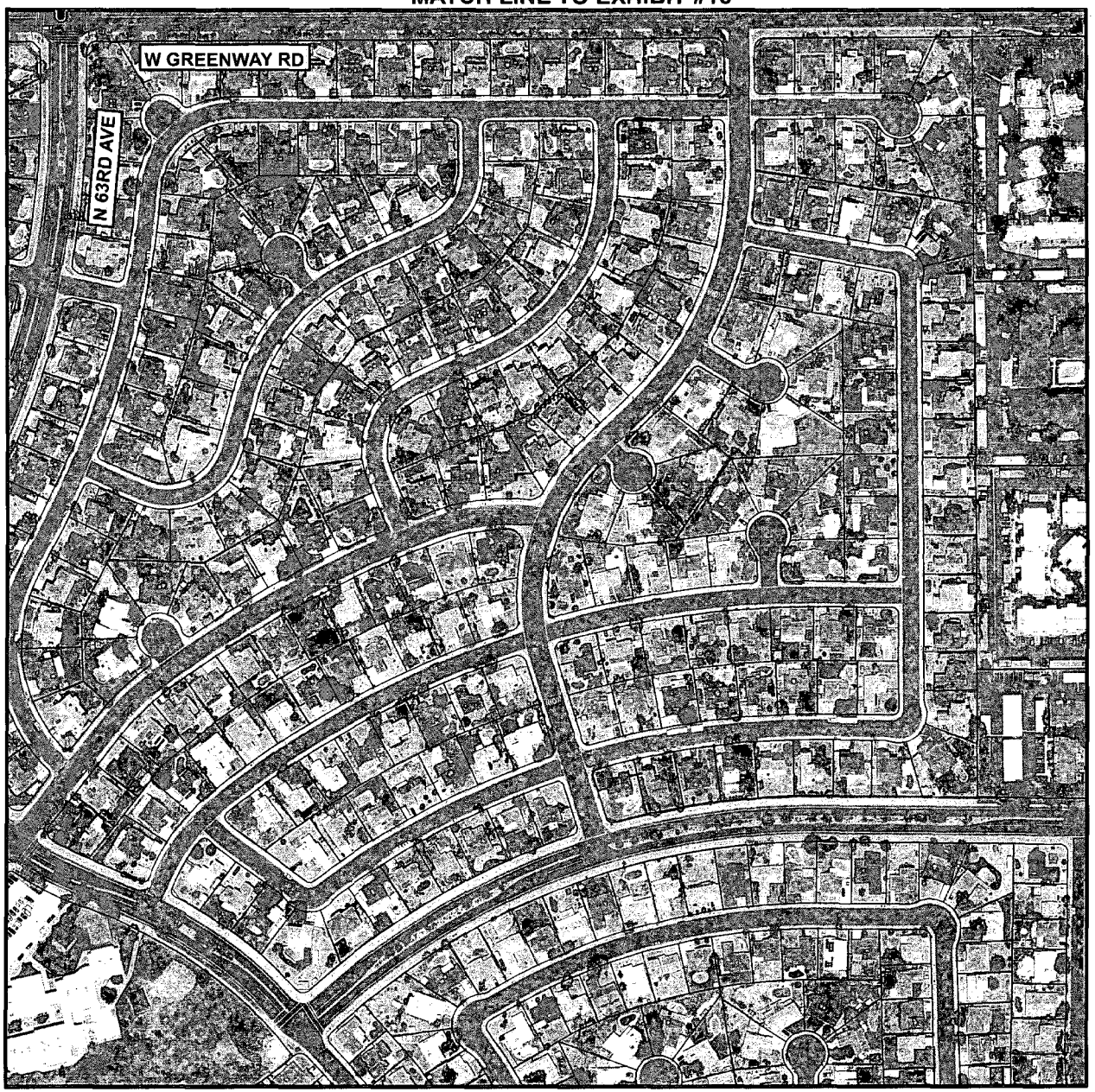
RITOCH-POWELL & Associates

Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

NORTH

MATCH LINE TO EXHIBIT #18



Feet

0 375 750

EXHIBIT 19 of 41

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.

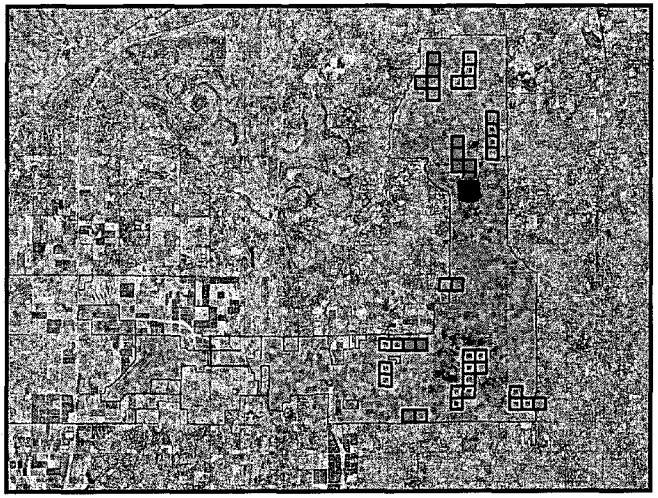
Legend

- ASPHALT_REPAIR_II
- SLURRY_SEAL_II
- CRACK_SEAL_II
- Sheet Grid Index

Council Districts

- BARREL
- CACTUS
- CHOLLA
- OCOTILLO
- SAHUARO
- YUCCA

VICINITY MAP



Prepared For:

GLENDALE

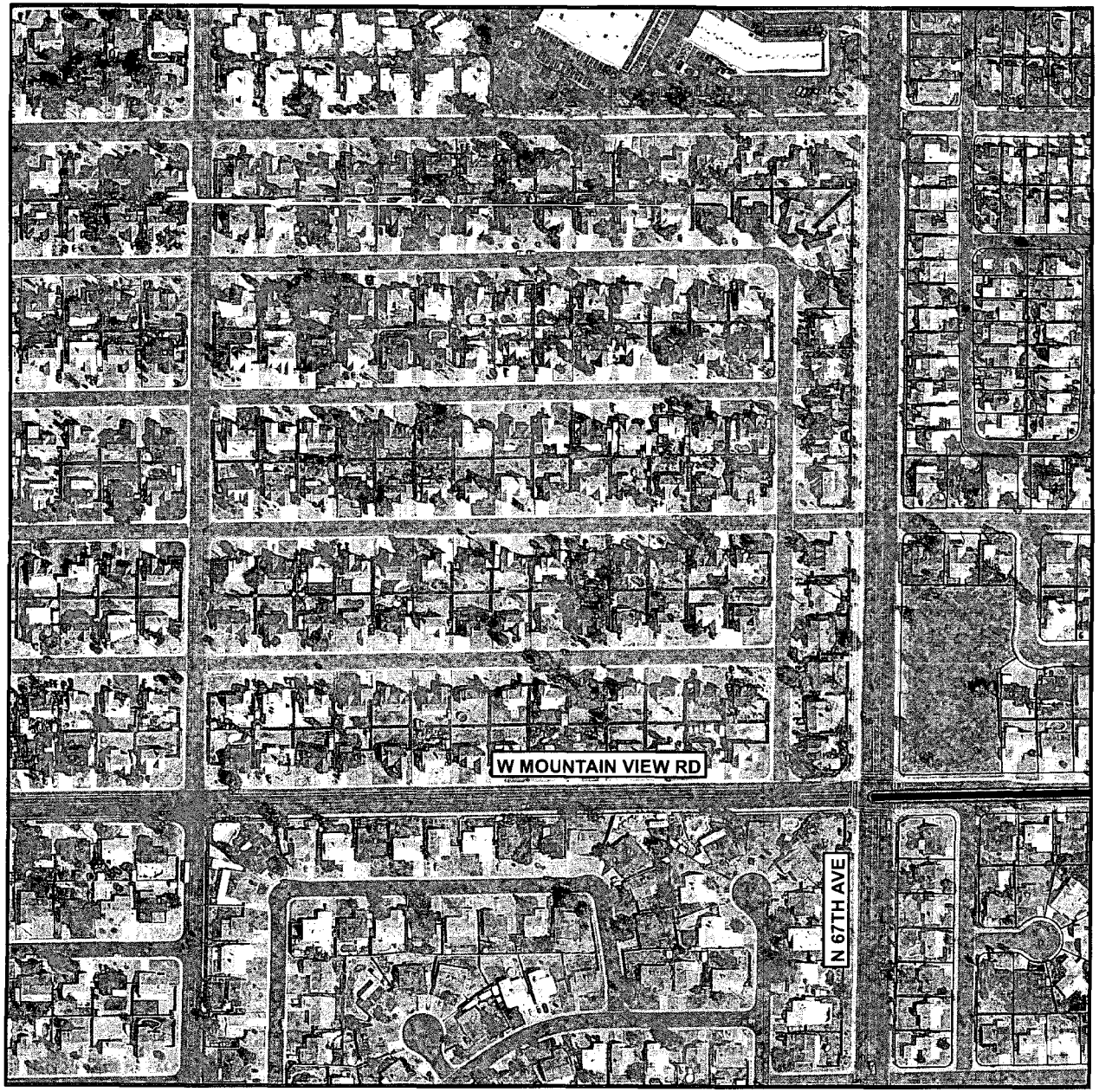
Prepared By:

RITOCH-POWELL & Associates

Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

NORTH



MATCH LINE TO EXHIBIT #21

Feet

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EXHIBIT 20 of 41

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.

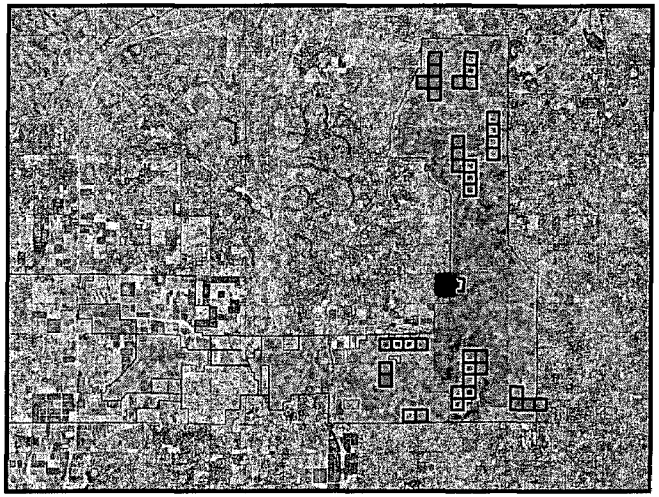
Legend

- ASPHALT_REPAIR_II
- SLURRY_SEAL_II
- CRACK_SEAL_II
- Sheet Grid Index

Council Districts

- BARREL
- CACTUS
- CHOLLA
- OCOTILLO
- SAHUARO
- YUCCA

VICINITY MAP



Prepared For:

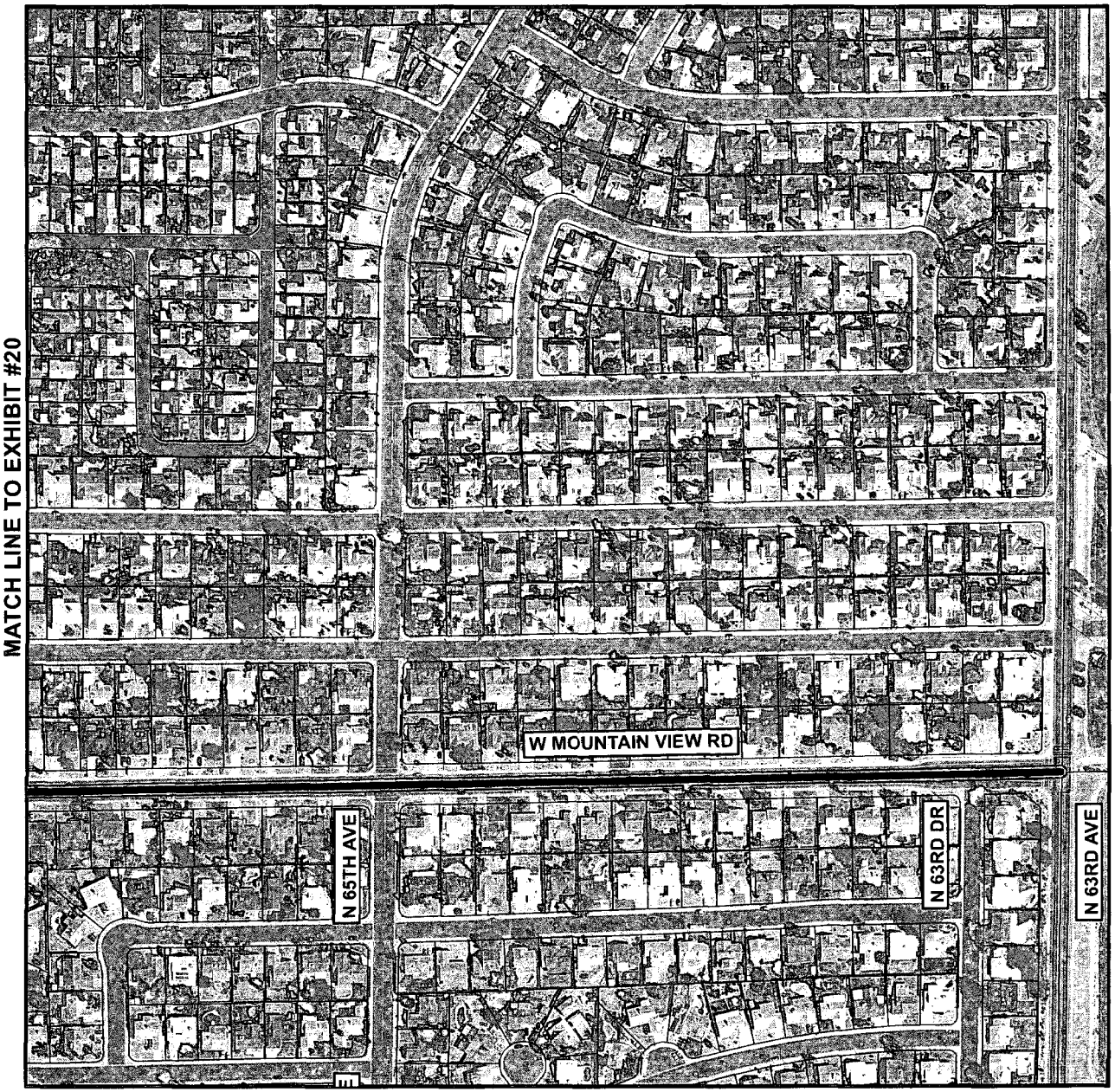
GLENDALE

Prepared By:

RITOCH POWELL & Associates
Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

NORTH



MATCH LINE TO EXHIBIT #20

Feet

0 375 750

EXHIBIT 21 of 41

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.

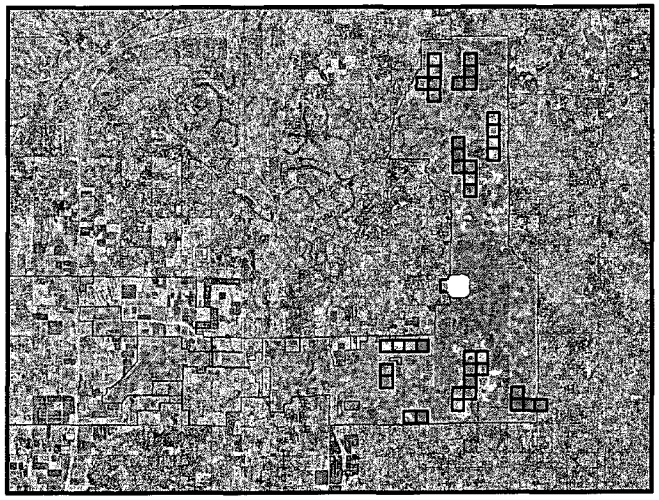
Legend

- ASPHALT_REPAIR_II
- SLURRY_SEAL_II
- CRACK_SEAL_II
- Sheet Grid Index

Council Districts

- BARREL
- CACTUS
- CHOLLA
- OCOTILLO
- SAHUARO
- YUCCA

VICINITY MAP



Prepared For:

GLENDALE

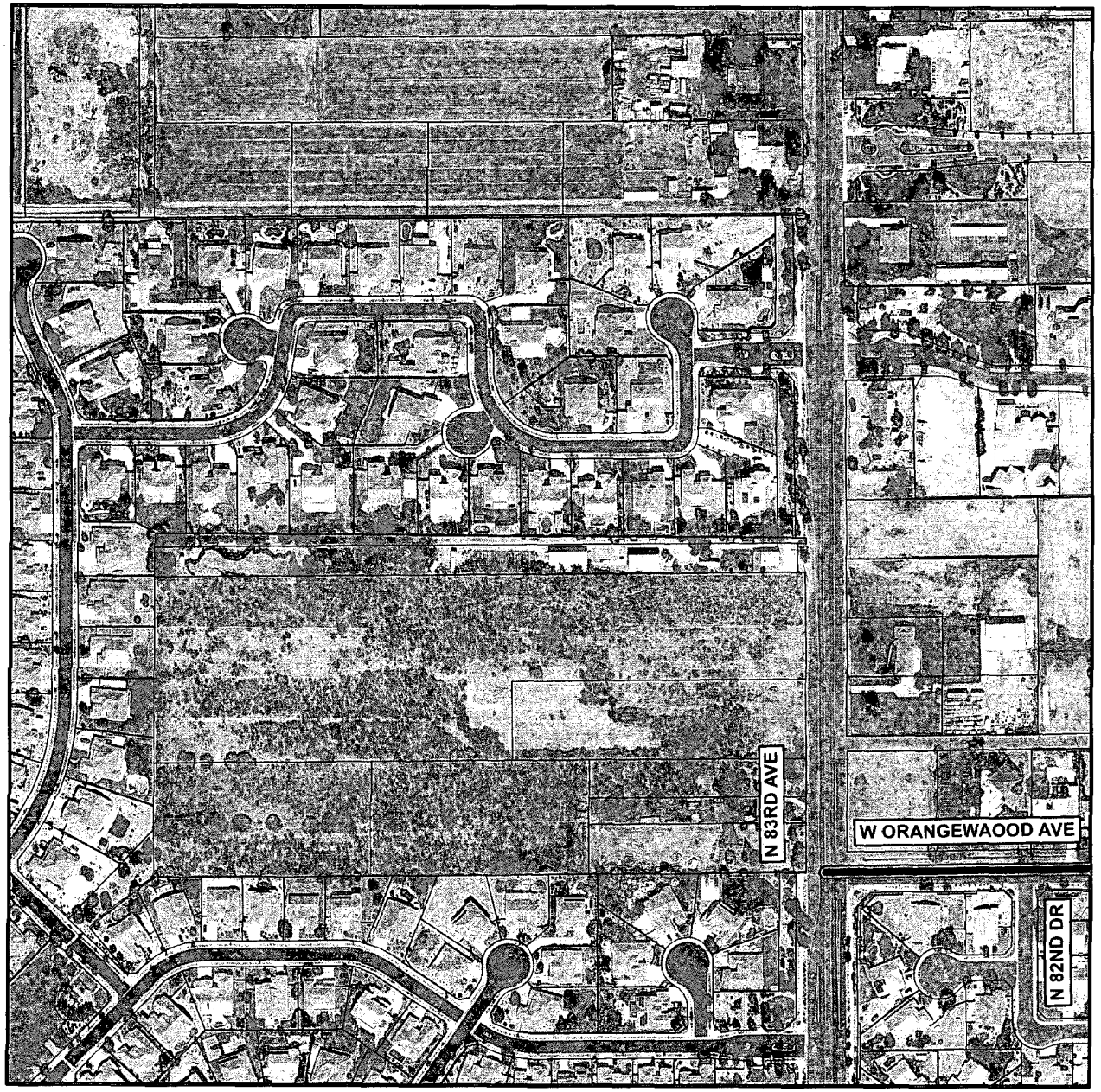
Prepared By:

RITOCH-POWELL & Associates

Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

NORTH



MATCH LINE TO EXHIBIT #23

Feet

0 375 750

EXHIBIT 22 of 41

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.

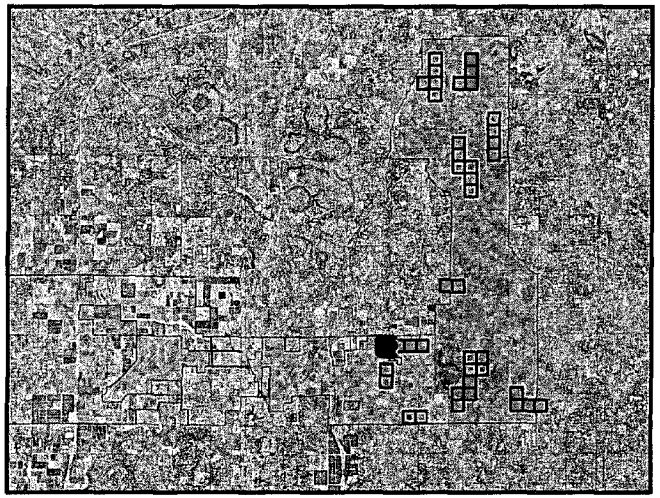
Legend

- ASPHALT_REPAIR_II
- SLURRY_SEAL_II
- CRACK_SEAL_II
- Sheet Grid Index

Council Districts

- BARREL
- CACTUS
- CHOLLA
- OCOTILLO
- SAHUARO
- YUCCA

VICINITY MAP



Prepared For:

GLENDALE

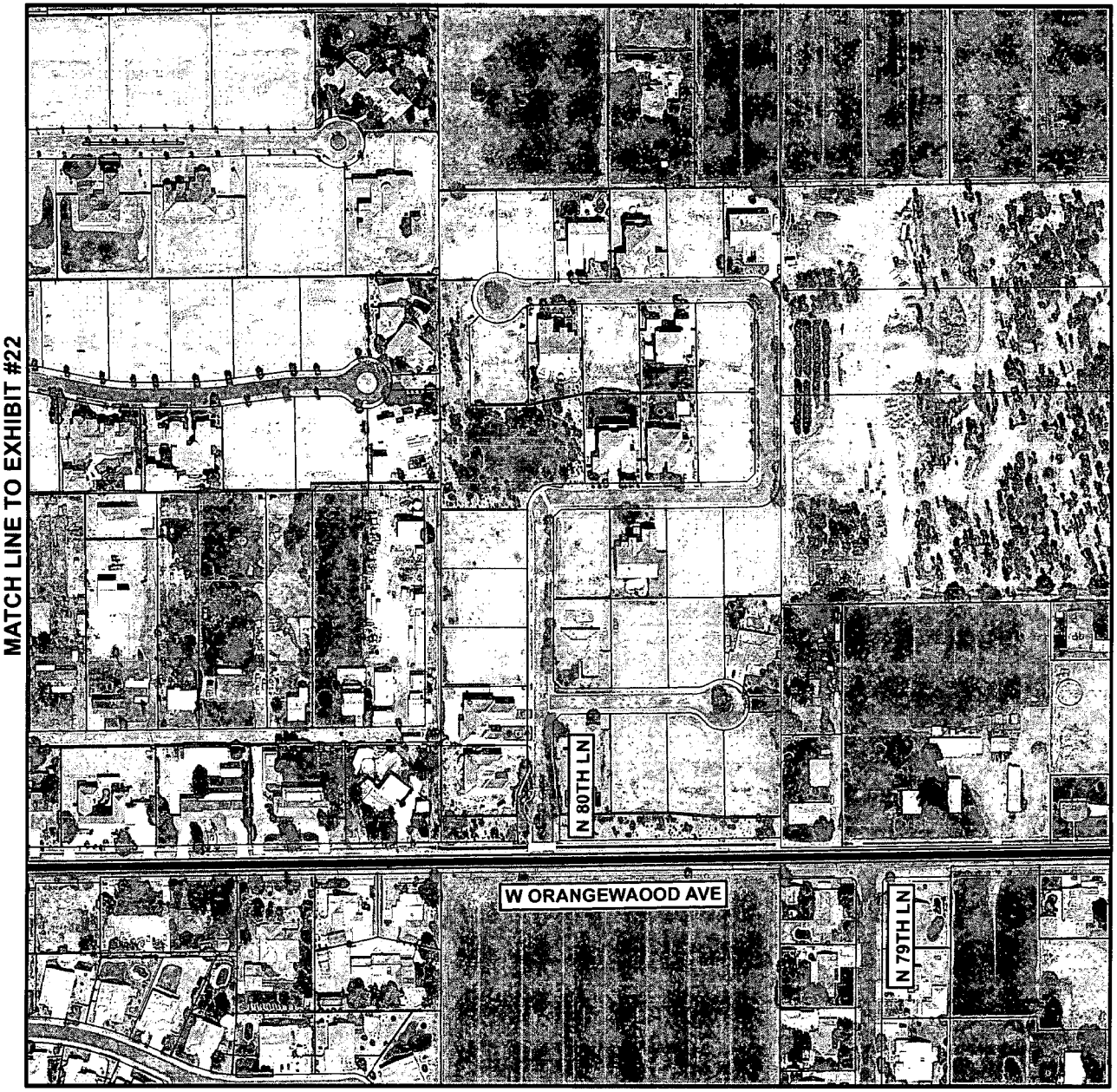
Prepared By:

RITOCH-POWELL & Associates

Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

NORTH



Feet

0 375 750

EXHIBIT 23 of 41

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.

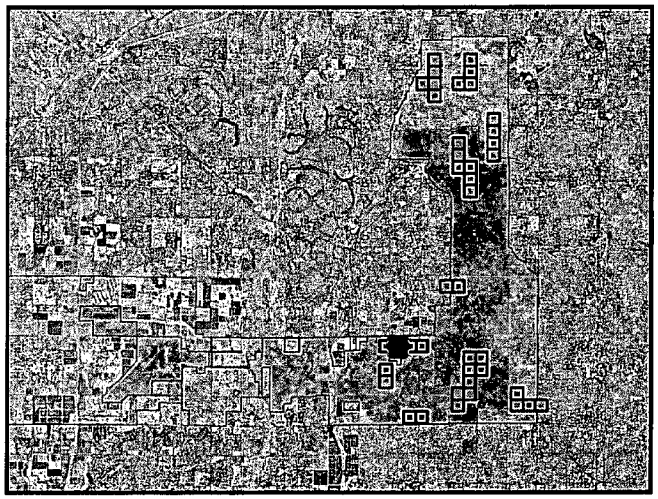
Legend

- ASPHALT_REPAIR_II
- SLURRY_SEAL_II
- CRACK_SEAL_II
- Sheet Grid Index

Council Districts

- BARREL
- CACTUS
- CHOLLA
- OCOTILLO
- SAHUARO
- YUCCA

VICINITY MAP



Prepared For:

GLENDALE

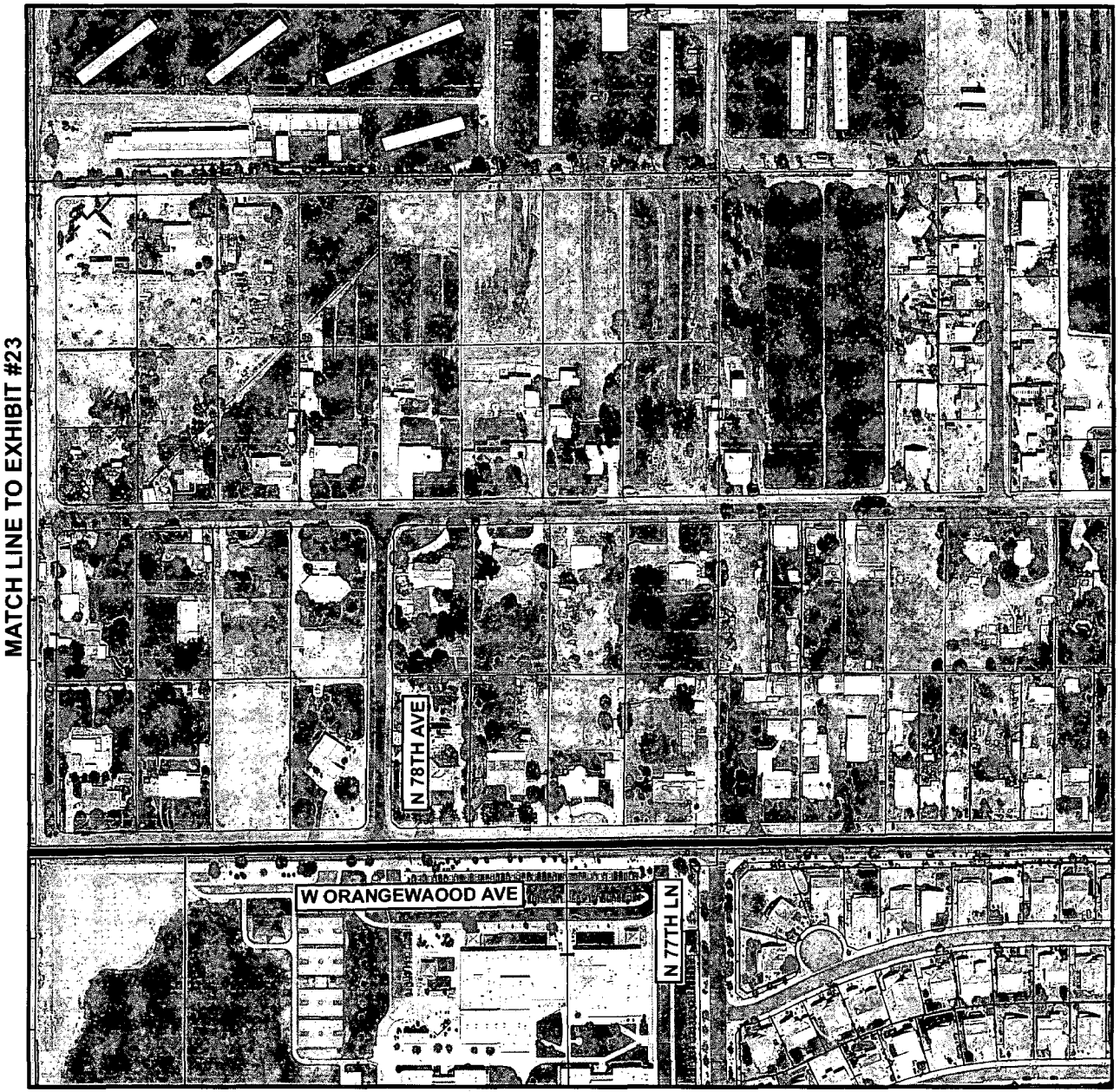
Prepared By:

RITOCH-POWELL & Associates

Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

NORTH



Feet

0 375 750

EXHIBIT 24 of 41

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.

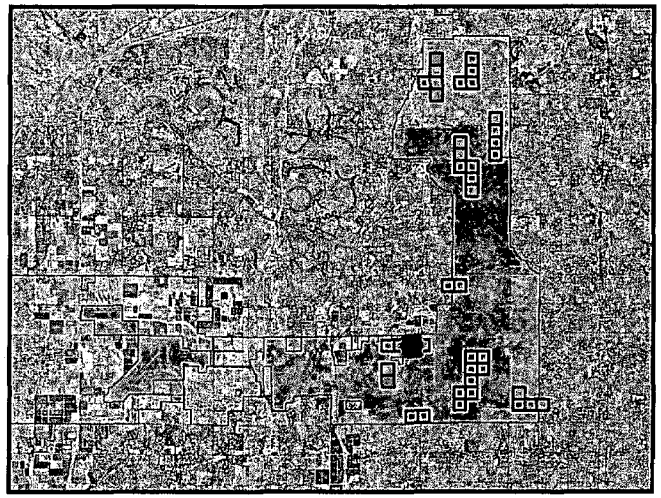
Legend

- ASPHALT_REPAIR_II
- SLURRY_SEAL_II
- CRACK_SEAL_II
- Sheet Grid Index

Council Districts

- BARREL
- CACTUS
- CHOLLA
- OCOTILLO
- SAHUARO
- YUCCA

VICINITY MAP



Prepared For:

GLENDALE

Prepared By:

RITOCH-POWELL & Associates

Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

NORTH

MATCH LINE TO EXHIBIT #24

Feet

0 375 750

EXHIBIT 25 of 41

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.

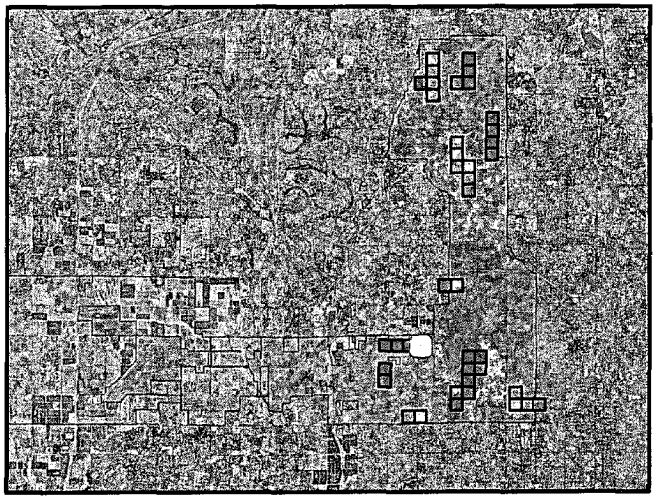
Legend

- ASPHALT_REPAIR_II
- SLURRY_SEAL_II
- CRACK_SEAL_II
- Sheet Grid Index

Council Districts

- BARREL
- CACTUS
- CHOLLA
- OCOTILLO
- SAHUARO
- YUCCA

VICINITY MAP



Prepared For:

GLENDALE

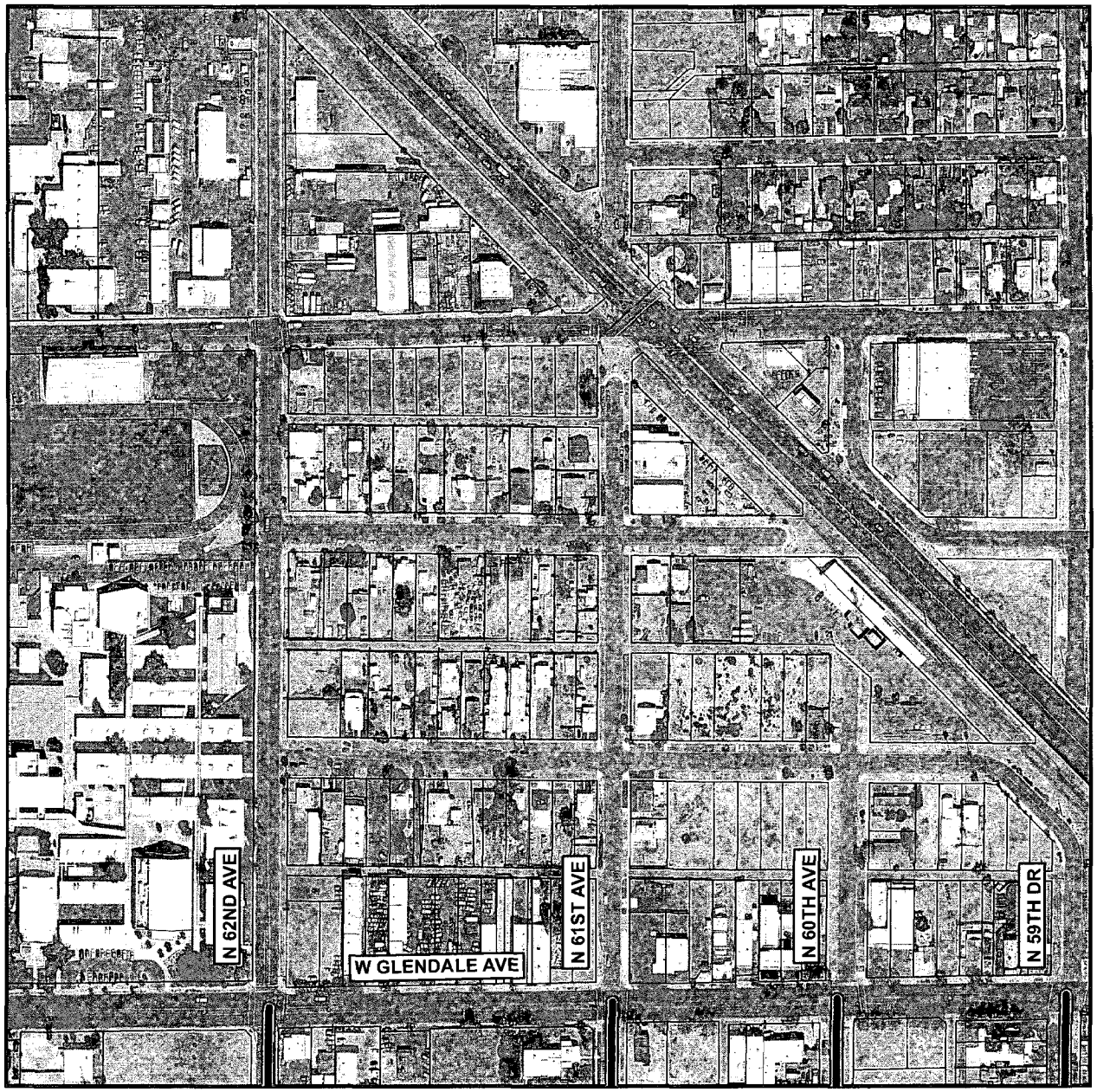
Prepared By:

RITOCH-POWELL & Associates

Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

NORTH



MATCH LINE TO EXHIBIT #27

MATCH LINE TO EXHIBIT #29

Feet

0 375 750

EXHIBIT 26 of 41

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.

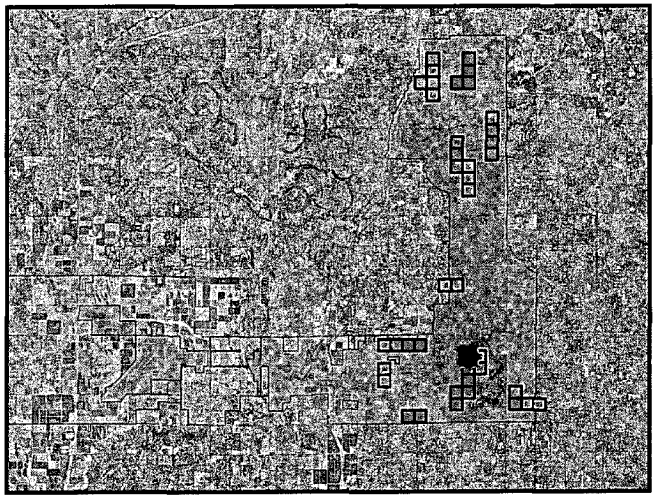
Legend

- ASPHALT_REPAIR_II
- SLURRY_SEAL_II
- CRACK_SEAL_II
- Sheet Grid Index

Council Districts

- BARREL
- CACTUS
- CHOLLA
- OCOTILLO
- SAHUARO
- YUCCA

VICINITY MAP



Prepared For:

GLENDALE

Prepared By:

RITOCH-POWELL & Associates

Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

NORTH

MATCH LINE TO EXHIBIT #26

MATCH LINE TO EXHIBIT #30

Feet

0 375 750

EXHIBIT 27 of 41

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.

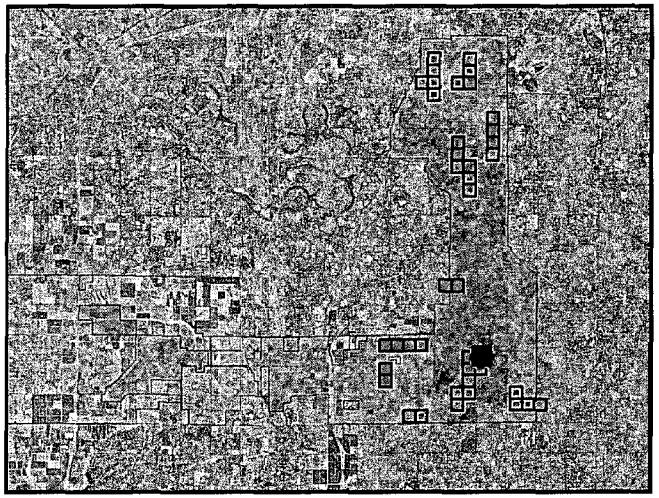
Legend

- ASPHALT_REPAIR_II
- SLURRY_SEAL_II
- CRACK_SEAL_II
- Sheet Grid Index

Council Districts

- BARREL
- CACTUS
- CHOLLA
- OCOTILLO
- SAHUARO
- YUCCA

VICINITY MAP



Prepared For:

GLENDALE

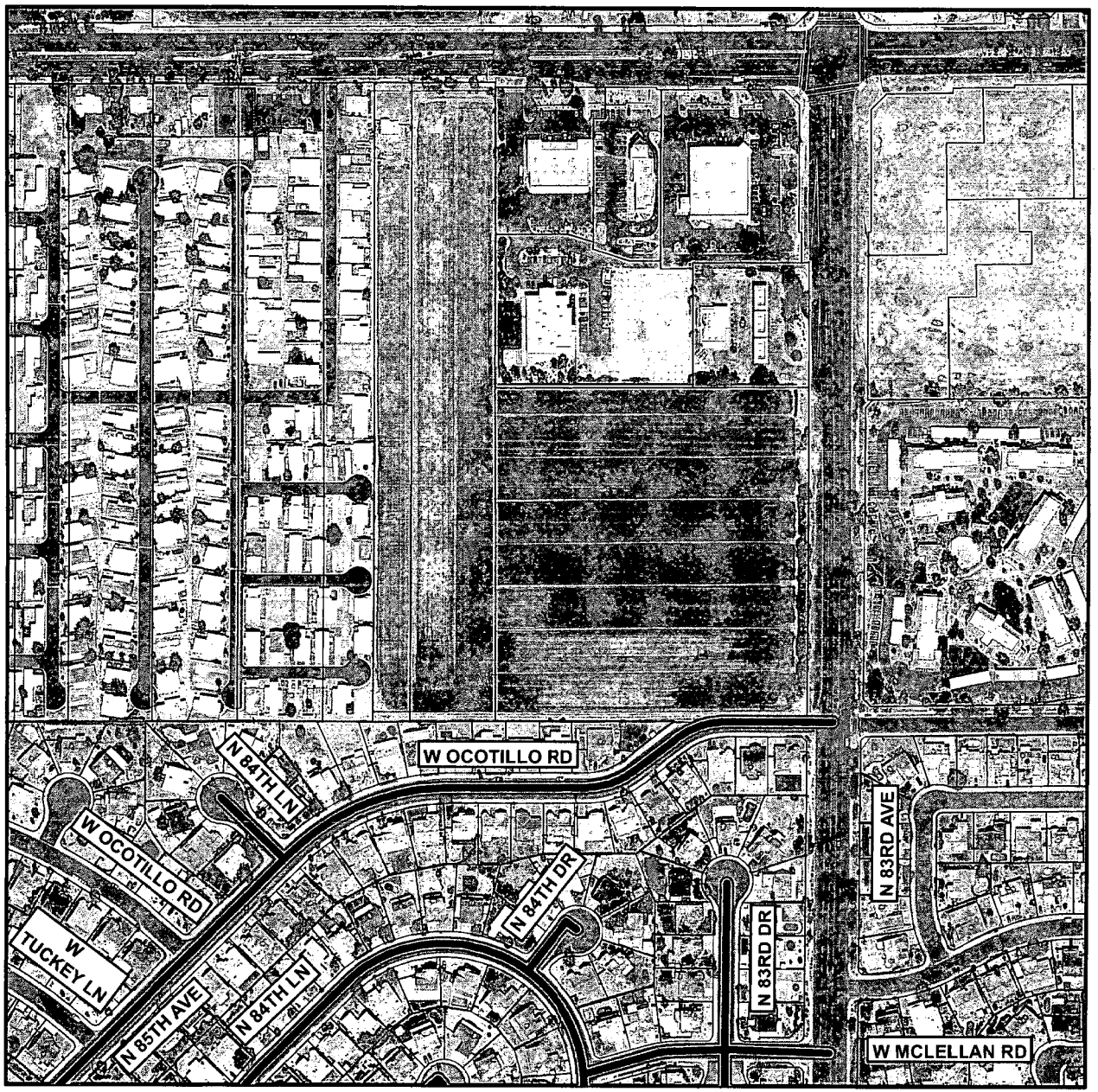
Prepared By:

RITOCH-POWELL & Associates

Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

NORTH



MATCH LINE TO EXHIBIT #31

Feet

0 375 750

EXHIBIT 28 of 41

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.

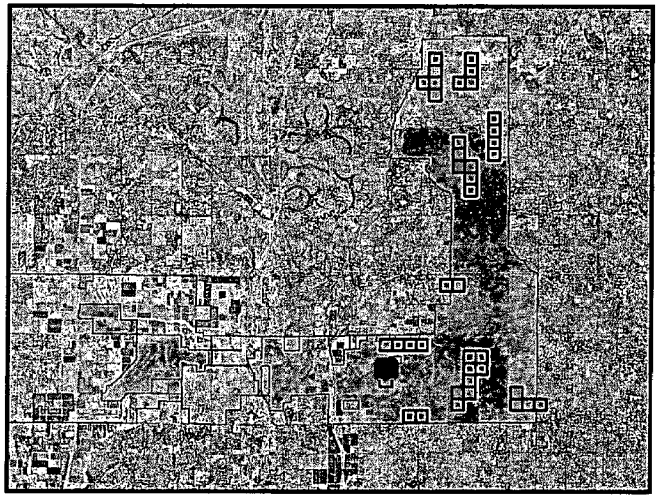
Legend

- ASPHALT_REPAIR_II
- SLURRY_SEAL_II
- CRACK_SEAL_II
- Sheet Grid Index

Council Districts

- BARREL
- CACTUS
- CHOLLA
- OCOTILLO
- SAHUARO
- YUCCA

VICINITY MAP



Prepared For:

GLENDALE

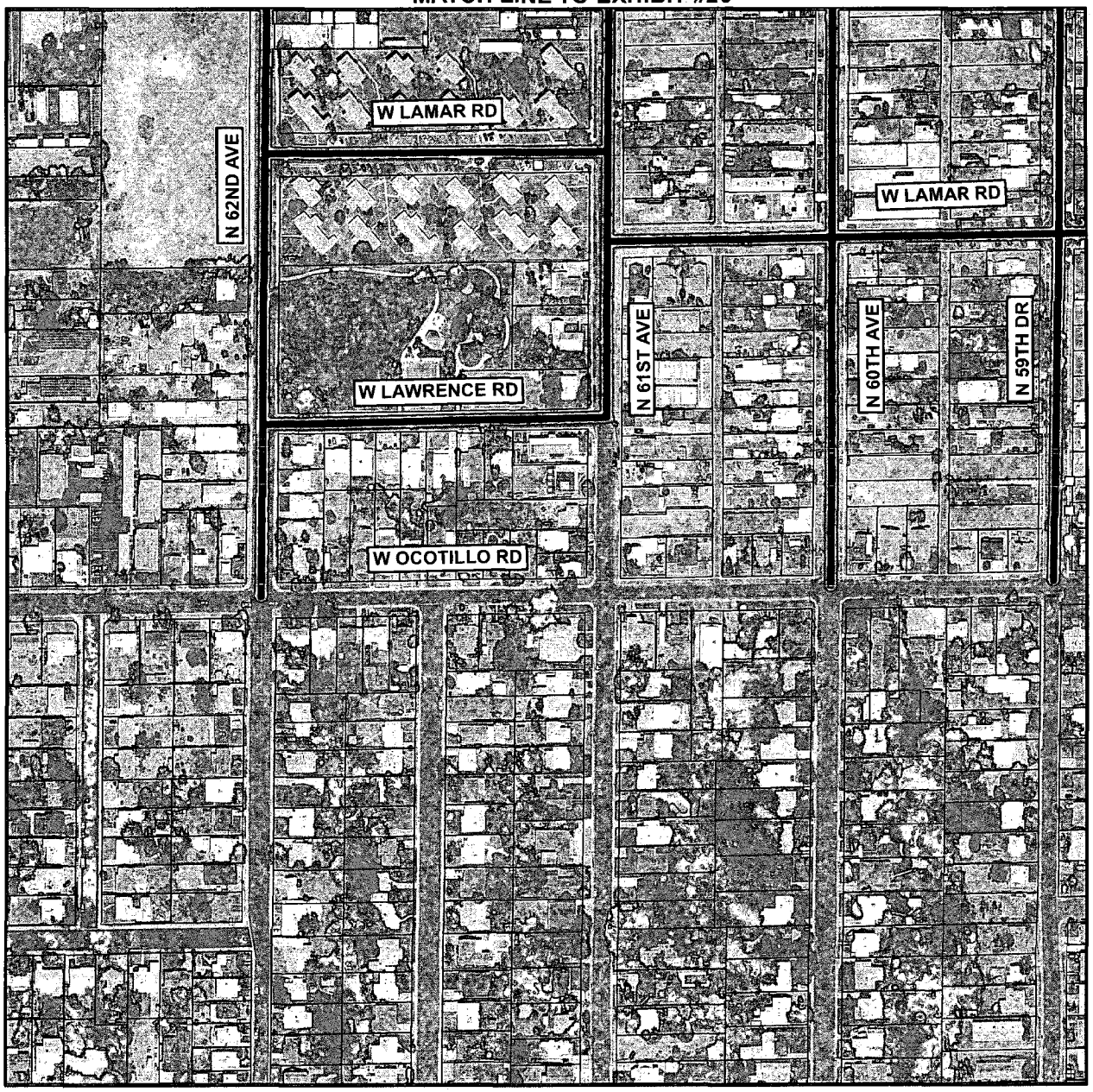
Prepared By:

RITOCH-POWELL & Associates
Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

NORTH

MATCH LINE TO EXHIBIT #26



MATCH LINE TO EXHIBIT #30

MATCH LINE TO EXHIBIT #32

Feet

0 375 750

EXHIBIT 29 of 41

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.

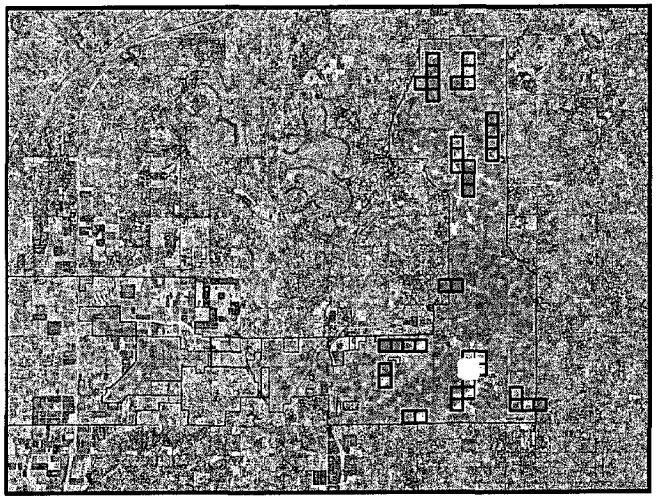
Legend

- ASPHALT_REPAIR_II
- SLURRY_SEAL_II
- CRACK_SEAL_II
- Sheet Grid Index

Council Districts

- BARREL
- CACTUS
- CHOLLA
- OCOTILLO
- SAHUARO
- YUCCA

VICINITY MAP



Prepared For:

GLENDALE

Prepared By:

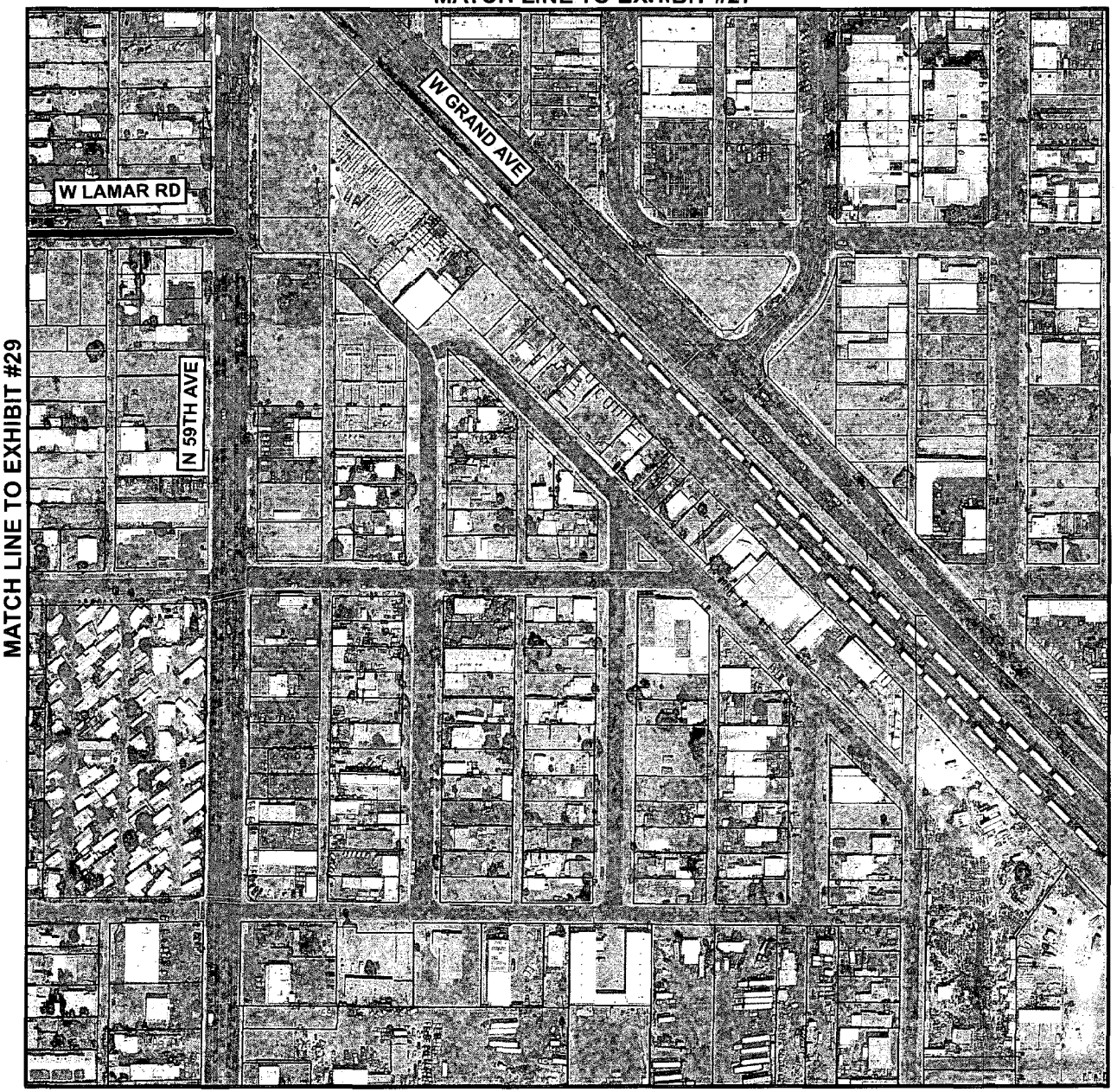
RITOCH-POWELL & Associates

Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

NORTH

MATCH LINE TO EXHIBIT #27



MATCH LINE TO EXHIBIT #29

Feet

0 375 750

EXHIBIT 30 of 41

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.

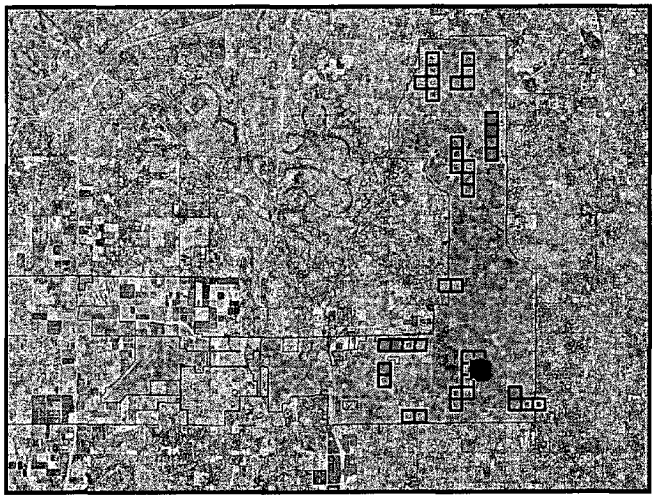
Legend

- ASPHALT_REPAIR_II
- SLURRY_SEAL_II
- CRACK_SEAL_II
- Sheet Grid Index

Council Districts

- BARREL
- CACTUS
- CHOLLA
- OCOTILLO
- SAHUARO
- YUCCA

VICINITY MAP



Prepared For:

GLENDALE

Prepared By:

RITOCH-POWELL & Associates

Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

NORTH

MATCH LINE TO EXHIBIT #28

Feet

0 375 750

EXHIBIT 31 of 41

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.

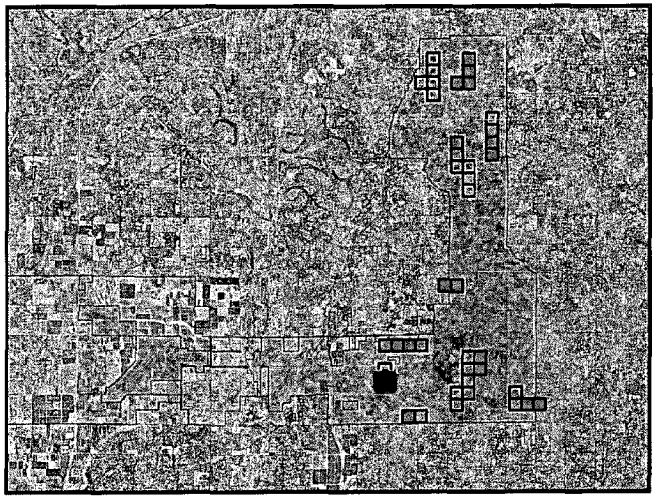
Legend

- ASPHALT_REPAIR_II
- SLURRY_SEAL_II
- CRACK_SEAL_II
- Sheet Grid Index

Council Districts

- BARREL
- CACTUS
- CHOLLA
- OCOTILLO
- SAHUARO
- YUCCA

VICINITY MAP



Prepared For:

GLENDALE

Prepared By:

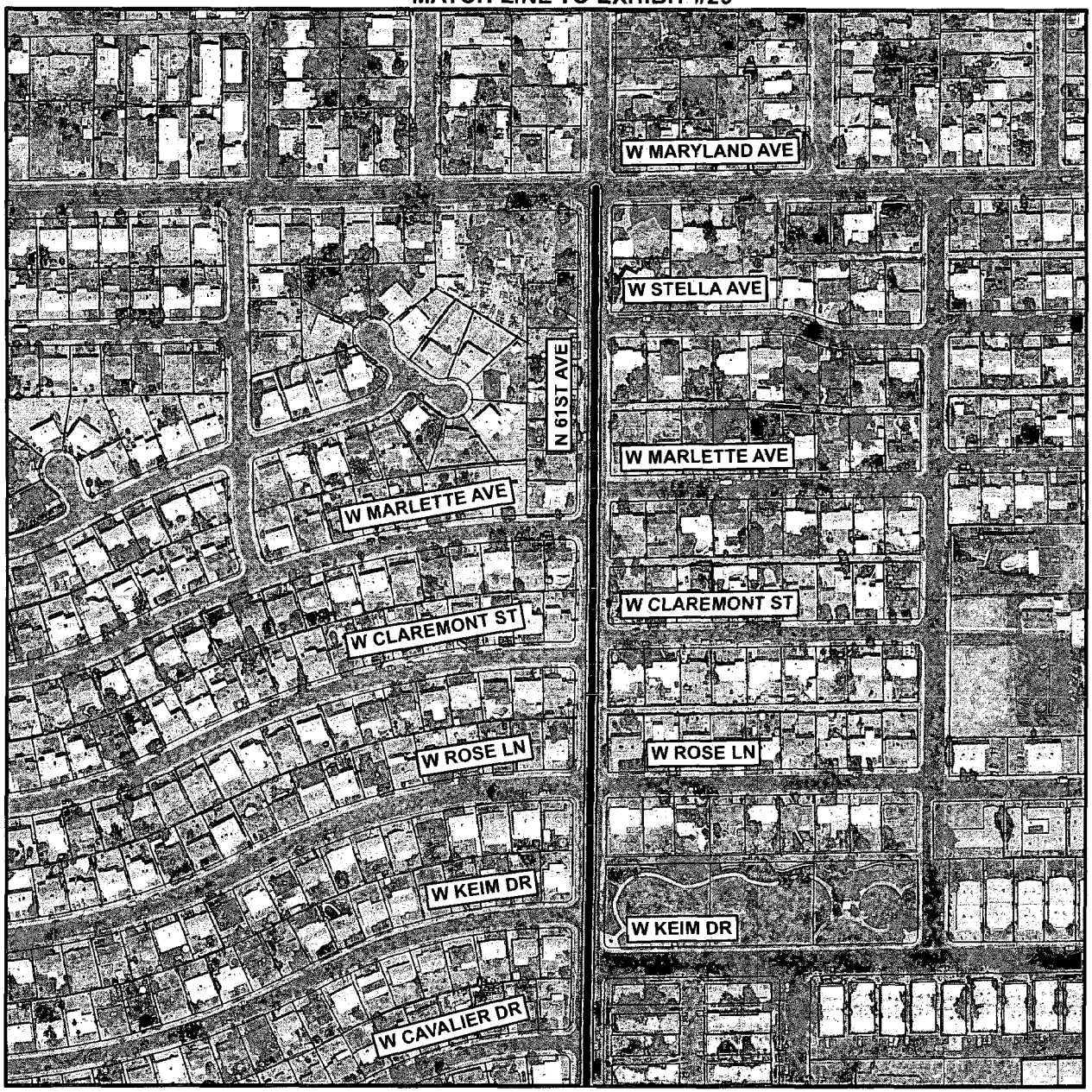
RITOCH-POWELL & Associates

Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

NORTH

MATCH LINE TO EXHIBIT #29



MATCH LINE TO EXHIBIT #34

EXHIBIT 32 of 41

Feet

0 375 750

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.

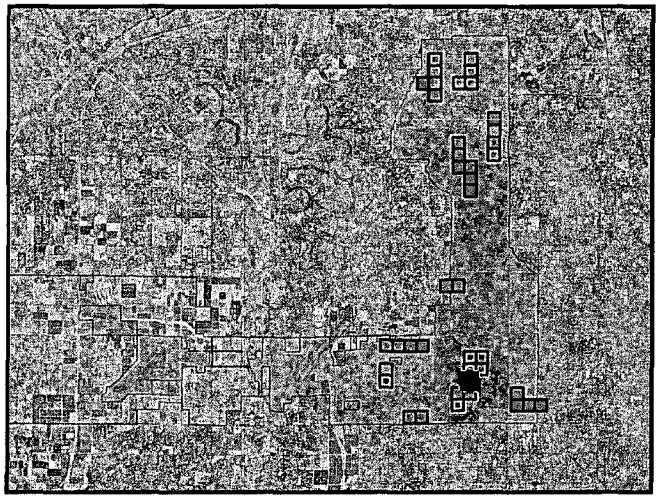
Legend

- ASPHALT_REPAIR_II
- SLURRY_SEAL_II
- CRACK_SEAL_II
- Sheet Grid Index

Council Districts

- BARREL
- CACTUS
- CHOLLA
- OCOTILLO
- SAHUARO
- YUCCA

VICINITY MAP



Prepared For:

GLENDALE

Prepared By:

RITOCH-POWELL & Associates

Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

NORTH

MATCH LINE TO EXHIBIT #34

MATCH LINE TO EXHIBIT #36

Feet

0 375 750

EXHIBIT 33 of 41

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.

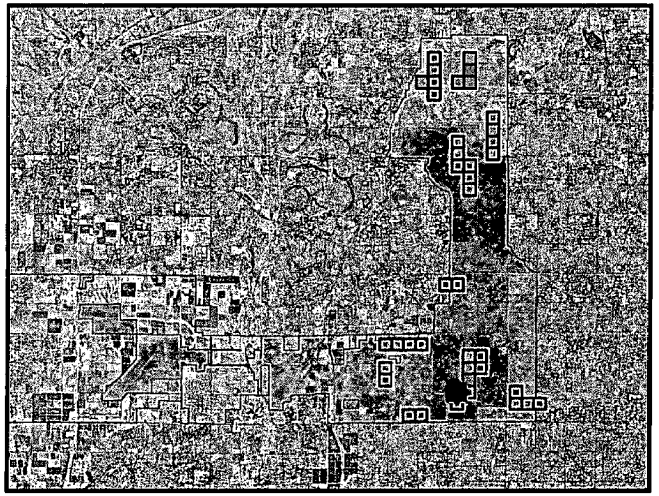
Legend

- ASPHALT_REPAIR_II
- SLURRY_SEAL_II
- CRACK_SEAL_II
- Sheet Grid Index

Council Districts

- BARREL
- CACTUS
- CHOLLA
- OCOTILLO
- SAHUARO
- YUCCA

VICINITY MAP



Prepared For:

GLENDALE

Prepared By:

RITOCH-POWELL & Associates

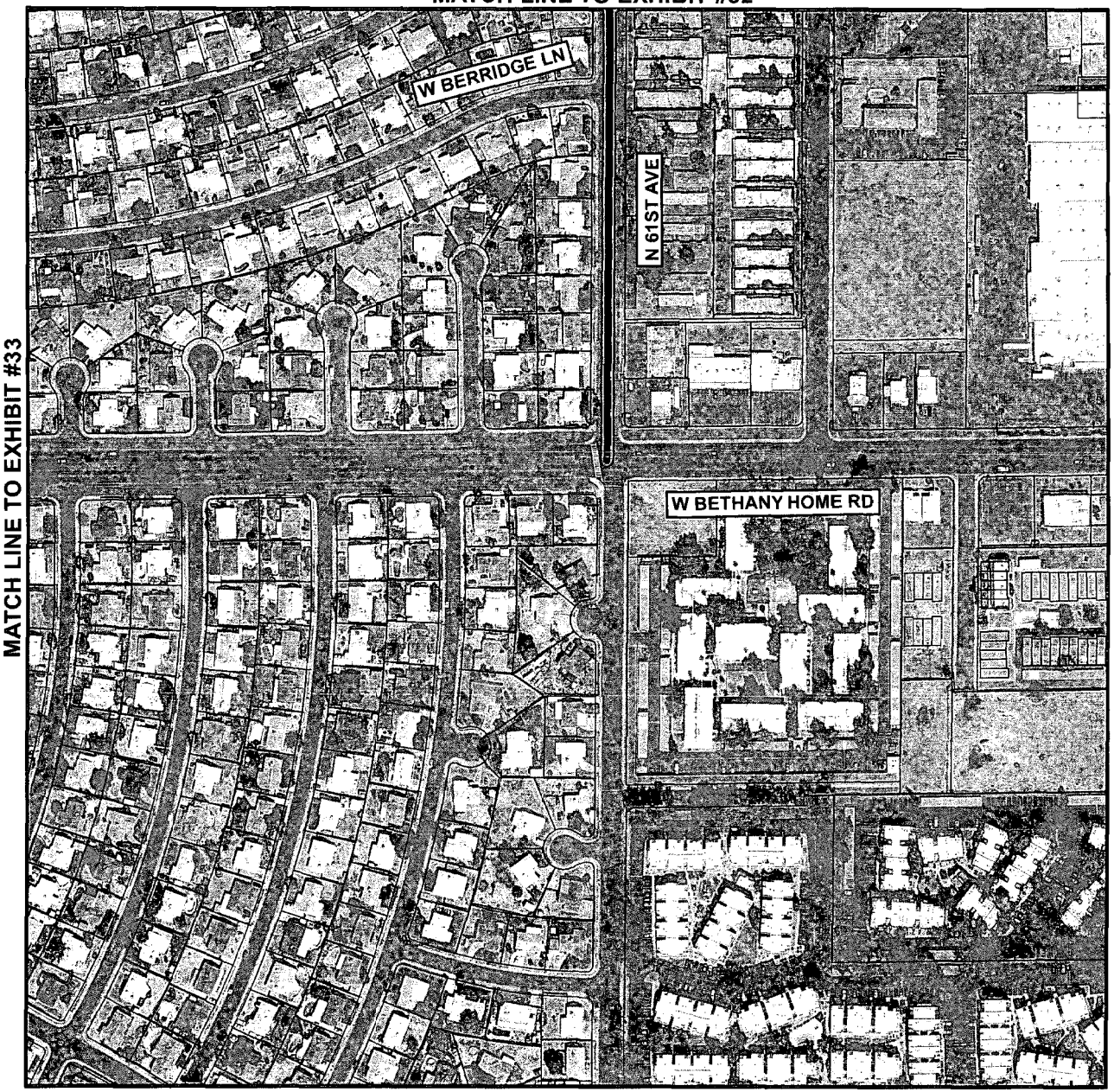
Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

NORTH

MATCH LINE TO EXHIBIT #32

MATCH LINE TO EXHIBIT #33



Feet

0 375 750

EXHIBIT 34 of 41

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.

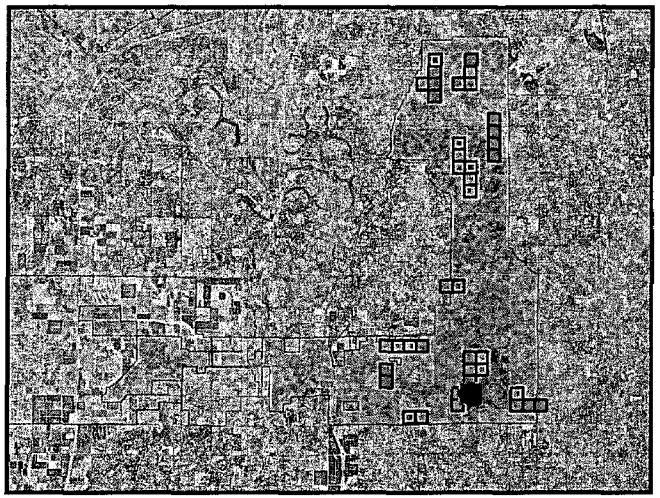
Legend

- ASPHALT_REPAIR_II
- SLURRY_SEAL_II
- CRACK_SEAL_II
- Sheet Grid Index

Council Districts

- BARREL
- CACTUS
- CHOLLA
- OCOTILLO
- SAHUARO
- YUCCA

VICINITY MAP



Prepared For:

GLENDALE

Prepared By:

RITOCH-POWELL & Associates

Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

NORTH

MATCH LINE TO EXHIBIT #37

Feet

0 375 750

EXHIBIT 35 of 41

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.

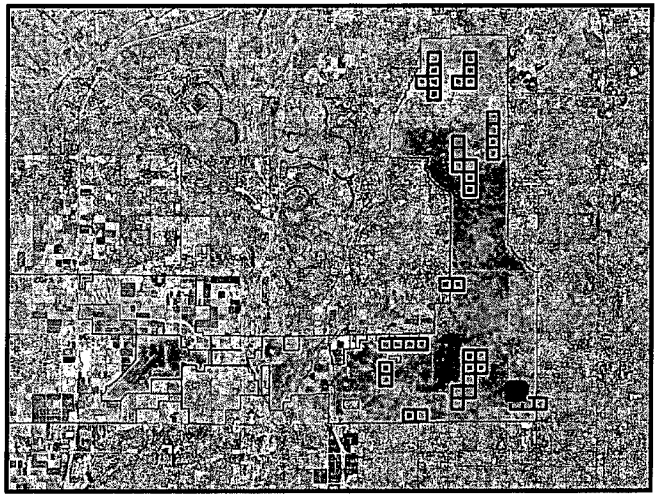
Legend

- ASPHALT_REPAIR_II
- SLURRY_SEAL_II
- CRACK_SEAL_II
- Sheet Grid Index

Council Districts

- BARREL
- CACTUS
- CHOLLA
- OCOTILLO
- SAHUARO
- YUCCA

VICINITY MAP



Prepared For:

GLENDALE

Prepared By:

RITOCH-POWELL & Associates

Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

NORTH

MATCH LINE TO EXHIBIT #33

Feet

0 375 750

EXHIBIT 36 of 41

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.

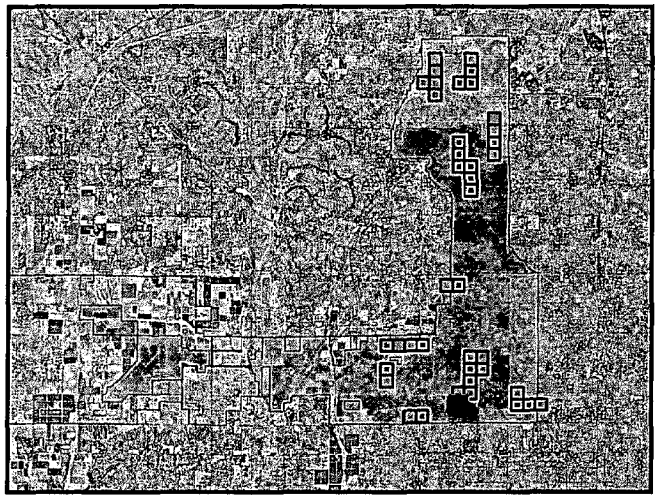
Legend

- ASPHALT_REPAIR_II
- SLURRY_SEAL_II
- CRACK_SEAL_II
- Sheet Grid Index

Council Districts

- BARREL
- CACTUS
- CHOLLA
- OCOTILLO
- SAHUARO
- YUCCA

VICINITY MAP



Prepared For:

GLENDALE

Prepared By:

RITOCH-POWELL & Associates

Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

NORTH

MATCH LINE TO EXHIBIT #35

MATCH LINE TO EXHIBIT #38

Feet

0 375 750

EXHIBIT 37 of 41

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.

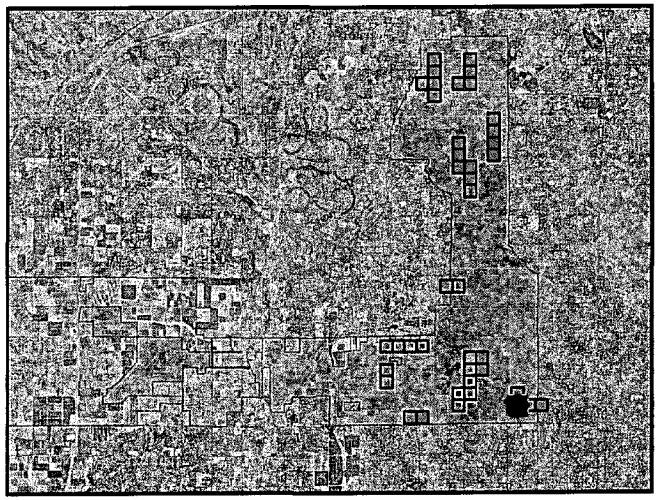
Legend

- ASPHALT_REPAIR_II
- SLURRY_SEAL_II
- CRACK_SEAL_II
- Sheet Grid Index

Council Districts

- BARREL
- CACTUS
- CHOLLA
- OCOTILLO
- SAHUARO
- YUCCA

VICINITY MAP



Prepared For:

GLENDALE

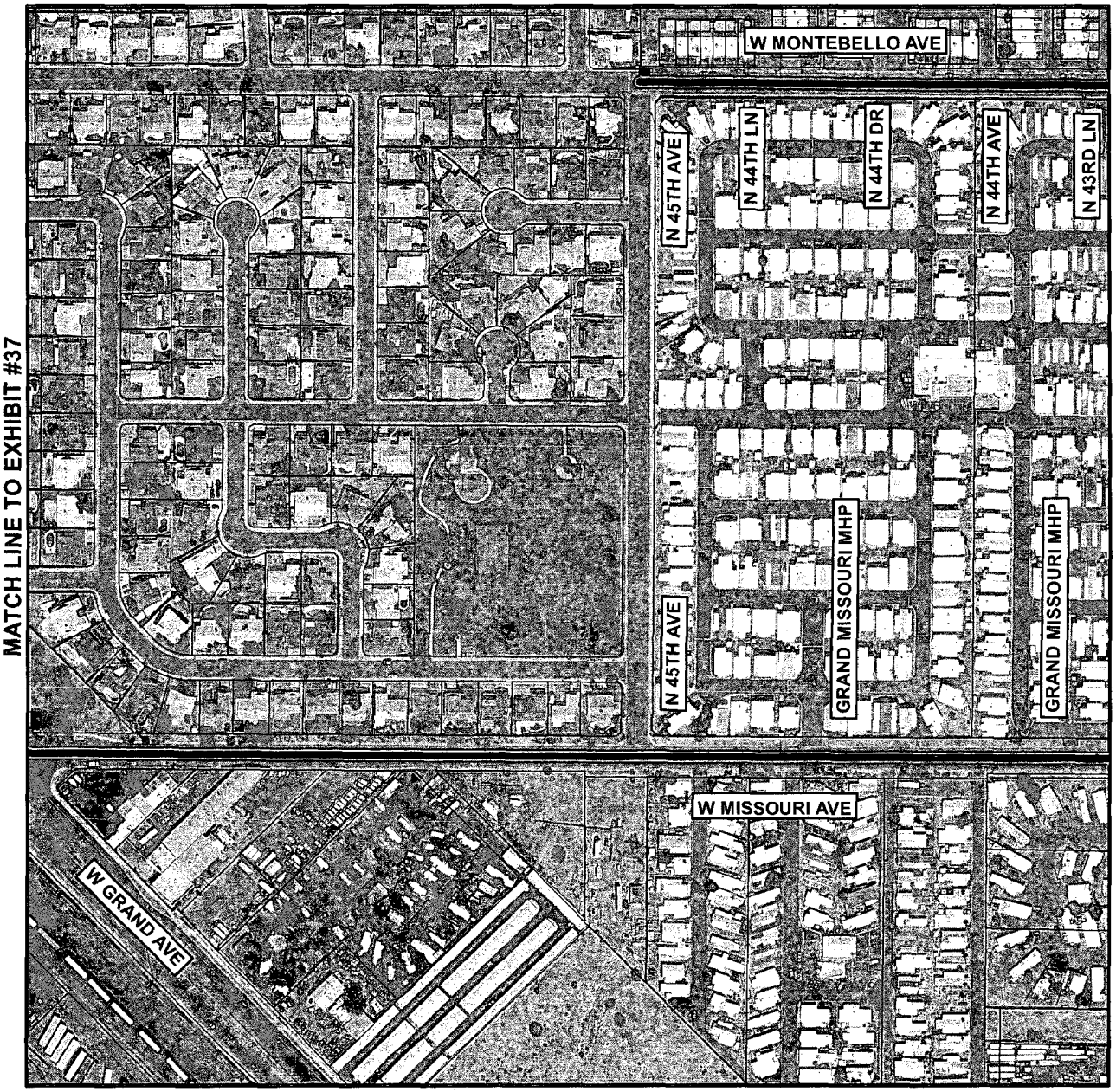
Prepared By:

RITOCH-POWELL & Associates

Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

NORTH



Feet

0 375 750

EXHIBIT 38 of 41

CONSTRUCTION NOTES:

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

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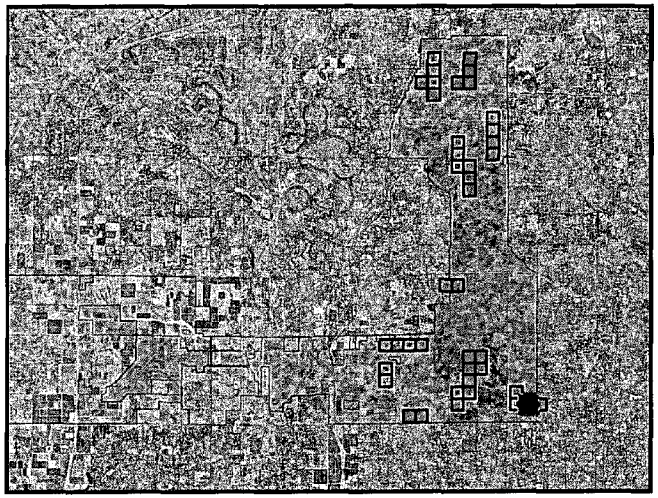
Legend

- ASPHALT_REPAIR_II
- SLURRY_SEAL_II
- CRACK_SEAL_II
- Sheet Grid Index

Council Districts

- BARREL
- CACTUS
- CHOLLA
- OCOTILLO
- SAHUARO
- YUCCA

VICINITY MAP



Prepared For:

GLENDALE

Prepared By:

RITOCH-POWELL & Associates

Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

NORTH

Feet

0 375 750

EXHIBIT 39 of 41

CONSTRUCTION NOTES:

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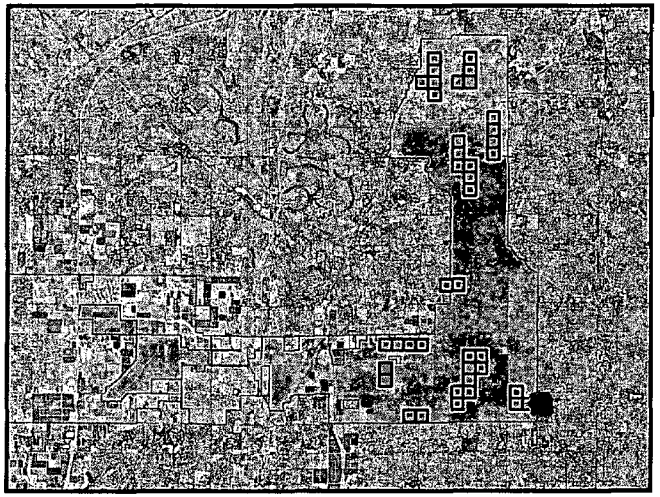
Legend

- ASPHALT_REPAIR_II
- SLURRY_SEAL_II
- CRACK_SEAL_II
- Sheet Grid Index

Council Districts

- BARREL
- CACTUS
- CHOLLA
- OCOTILLO
- SAHUARO
- YUCCA

VICINITY MAP



Prepared For:

GLENDALE

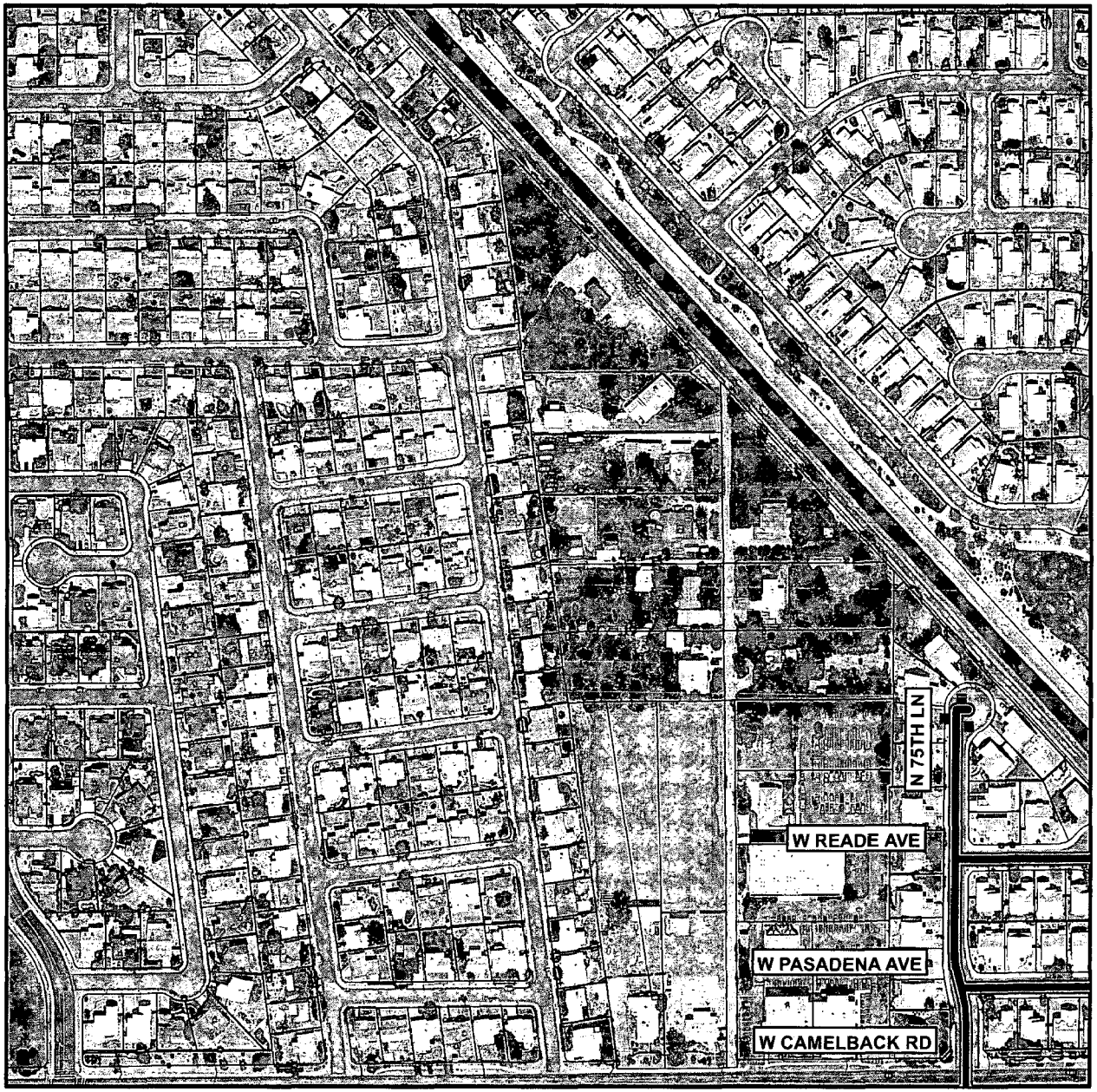
Prepared By:

RITOCH-POWELL & Associates

Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

NORTH



MATCH LINE TO EXHIBIT #41

Feet

0 375 750

EXHIBIT 40 of 41

CONSTRUCTION NOTES:

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

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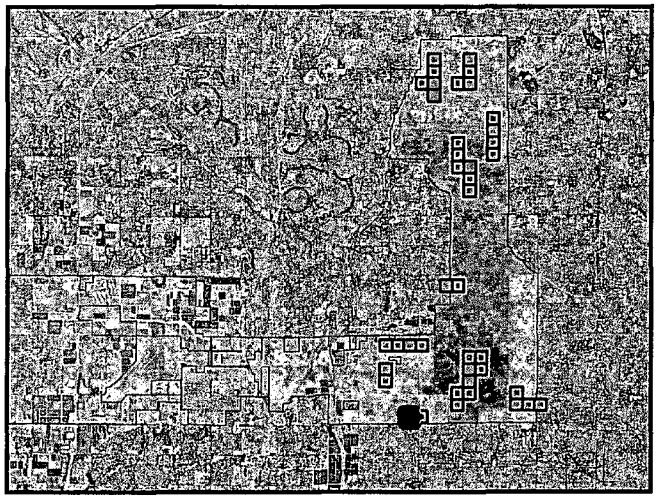
Legend

- ASPHALT_REPAIR_II
- SLURRY_SEAL_II
- CRACK_SEAL_II
- Sheet Grid Index

Council Districts

- BARREL
- CACTUS
- CHOLLA
- OCOTILLO
- SAHUARO
- YUCCA

VICINITY MAP



Prepared For:

GLENDALE

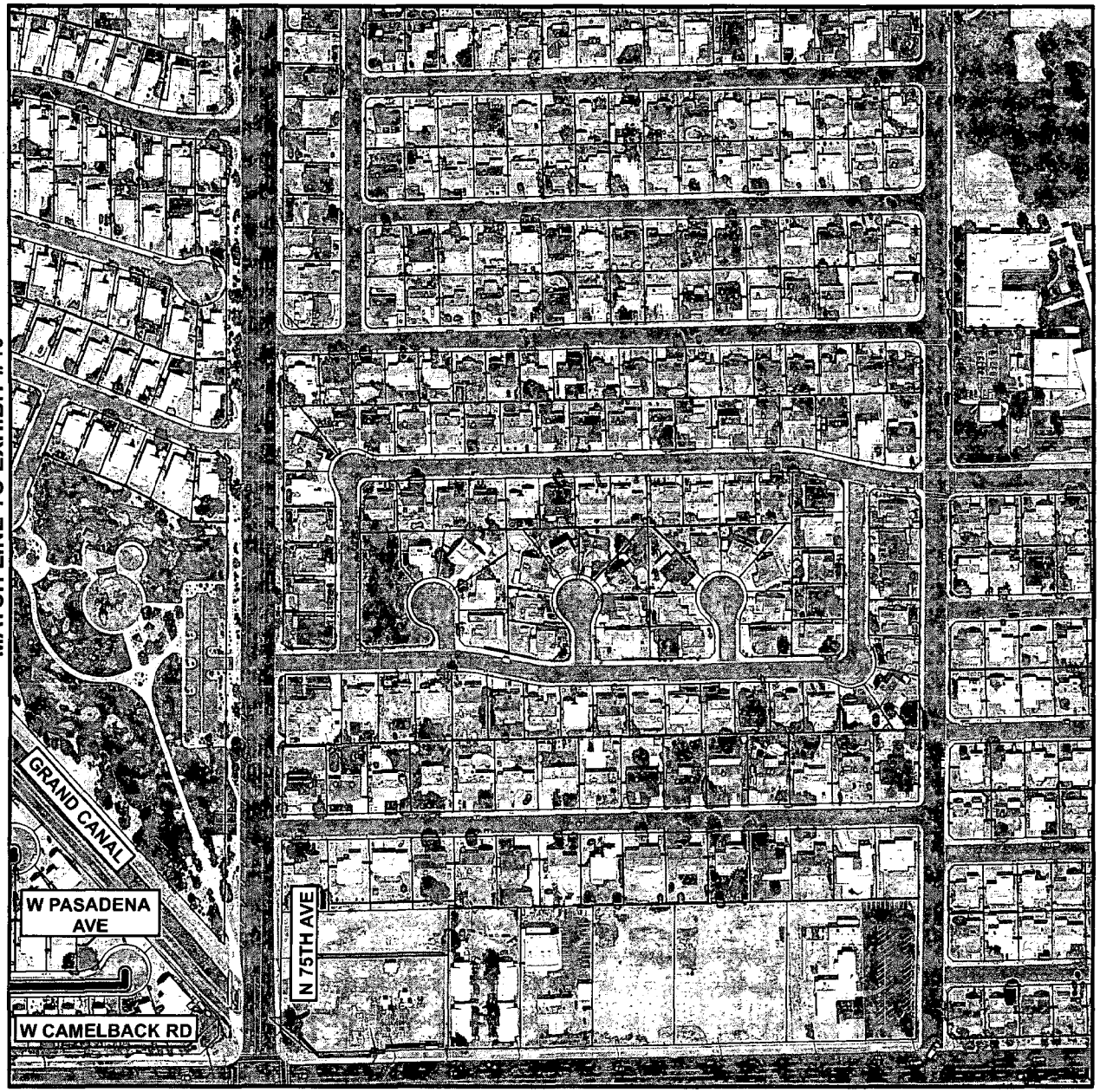
Prepared By:

RITOCH-POWELL & Associates

Civil Engineering and Surveying Consultants

IMPROVEMENT EXHIBIT

NORTH



Feet

0 375 750

EXHIBIT 41 of 41

CONSTRUCTION NOTES:

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

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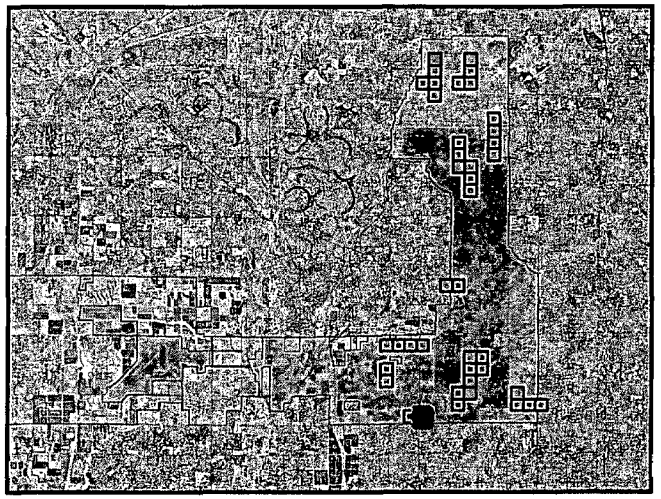
- ASPHALT_REPAIR_II
- SLURRY_SEAL_II
- CRACK_SEAL_II
- Sheet Grid Index

Council Districts

- BARREL
- CACTUS
- CHOLLA
- OCOTILLO
- SAHUARO
- YUCCA

VICINITY MAP



Prepared For:

GLENDALE

Prepared By:

RITOCH-POWELL & Associates

Civil Engineering and Surveying Consultants

APPENDIX C

MARKING PLANS

CITY OF GLENDALE

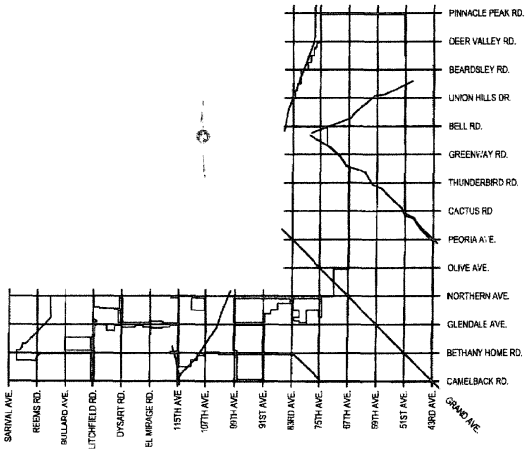
GLENDALE, ARIZONA

141514

2014/2015 PAVEMENT MANAGEMENT PROGRAM

SLURRY SEAL PHASE 2 MARKING PLANS

GLENDALE



VICINITY MAP

SHEET INDEX

SHEET NO.	
1	COVER SHEET
2	LEGEND AND NOTES SHEET
3-50	MARKING PLAN SHEETS

MAYOR
JERRY P. WEIERS

CITY COUNCIL
JAMIE ALDAMA
SAMUEL U. CHAVIRA
IAN HUGH
GARY D. SHERWOOD
LAUREN TOLMACHOFF
BART TURNER

ACTING CITY MANAGER
RICHARD A. BOWERS

CITY CLERK
PAMELA HANNA

CITY ATTORNEY
MICHAEL D. BAILEY

RECORD DRAWING

I certify that the locations, elevations, depths and record drawing comments accurately reflect the existing field conditions and materials actually used during construction. This certification is based on periodic field observations and the contractors representations of the facilities as constructed.

NAME _____ DATE _____ (SEAL)

REGISTRATION NO. _____ EXP. DATE _____

REVD. BY: _____
CONSTRUCTION ENGINEER

PLANS ACCEPTANCE

The City of Glencale accepts these plans for construction, as being in general compliance with plan preparation recuirements of the City. Responsibility for the completeness and accuracy of the plans and related design resides with the Engineer and the Engineering Firm of Record.

David D. Bend
CITY ENGINEER — DATE 3/24/2015

Cathy Colbath
DEPUTY PUBLIC WORKS DIRECTOR - TRANSPORTATION — DATE 3/23/15

Registered Professional Engineer (Civil) — CERTIFICATE NO. 28940 — FRANK E. HENDERSON III — Date Signed 3/24/15 — ARIZONA, U.S.A.

EXPIRES 3/31/16

Know what's below. Call before you dig.

FILE NAME: 01_ST2-CVR01_XX.DWG PLOTTING DATE: 03-23-15 REVISION DATE: 03-23-15 AUTOCAD VER.: 2012

CITY OF GLENDALE
PROJECT NO. 141514
SLURRY SEAL PHASE 2

CITY OF GLENDALE
ENGINEERING DEPARTMENT
5850 W. GLENDALE AVE.
GLENDALE, ARIZONA 85301 (623) 930-3530

RITOCH-POWELL & Associates
602.263.1177
www.ritochpowell.com

RPA

2014/2015 PAVEMENT MANAGEMENT PROGRAM
SLURRY SEAL PHASE 2
CITY OF GLENDALE

DRAWING

MAP

DRAWN AS/CG/SK | CHECKED RS/TB
DATE MAR 2015
SHEET 01 OF 50

DSC # 150129

PAVEMENT MARKING LEGEND

4DY	4" DOUBLE YELLOW	4BW	4" SOLID WHITE
4DY20	4" SOLID DOUBLE YELLOW LINE TYPE 'D' RPMS @20' (EACH LINE)	12SW20	12" SOLID WHITE TYPE 'G' RPMS
4BY	4" BROKEN YELLOW	4BW	4" BROKEN WHITE
6SY	6" SOLID YELLOW	6SW	6" SOLID WHITE
4SBY	4" SOLID BROKEN YELLOW	8SW	8" SOLID WHITE
12SY	12" SOLID YELLOW	12SW	12" SOLID WHITE

1 TURN ARROWS (LEFT/RIGHT/THROUGH/BOTH STRIPPING)

2 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.

811 Know what's below. Call before you dig.

CITY OF GLENDALE
PROJECT NO. 141514
SLURRY SEAL PHASE 2

CITY OF GLENDALE
ENGINEERING DEPARTMENT
5850 W. GLENDALE AVE.
GLENDALE, ARIZONA 85301 (623) 930-3630

RITOCH-POWELL & Associates
602.263.1177
www.ritochpowell.com

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2014/2015 PAVEMENT MANAGEMENT PROGRAM
SLURRY SEAL PHASE 2
CITY OF GLENDALE

DRAWING
MAP
DRAWN AS/CG/SK
CHECKED RS/TB
DATE MAR 2015
SHEET 02 OF 50

P:\Projects\2014\214089 - City of Glendale FY 2014 - 2015 Pavement Pres\CAD Files\Sheets\Surface Treatment 2\02 S12-LGND2 XX.dwg 3/24/2015 7:46:59 AM RYAN

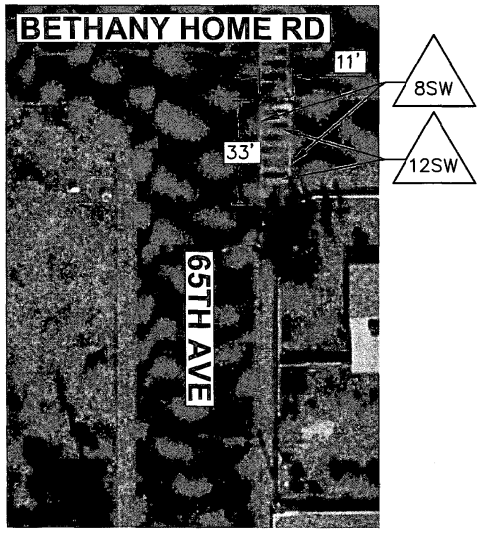

EXHIBIT 33

N

0 10 20 40
SCALE: 1" = 40

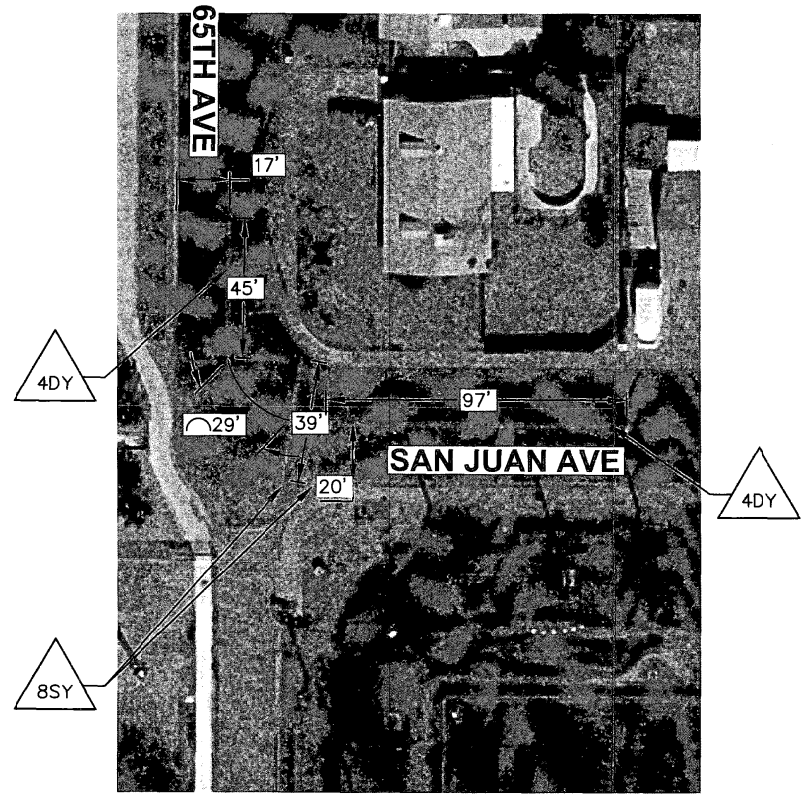

EXHIBIT 36

N

0 10 20 40
SCALE: 1" = 40

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

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CITY OF GLENDALE
PROJECT NO. 141514
SLURRY SEAL PHASE 2

CITY OF GLENDALE
ENGINEERING DEPARTMENT
5850 W. GLENDALE AVE.
GLENDALE, ARIZONA 85301 (623) 930-3630

RPA
RITOCH-POWELL & Associates
602.263.1177
www.ritochpowell.com

2014/2015 PAVEMENT MANAGEMENT PROGRAM
65TH AVE & SAN JAUN AVE
65TH AVE & BETHANY HOME

DRAWING
ST-01

MAP
EXHIBIT 33/36

DRAWN	CHECKED
AS/CG/SK	RS/TB

DATE
MAR 2015

SHEET
03 OF 50

P:\Projects\2014\214089 - City of Glendale FY 2014 - 2015 Pavement Pres\CAD Files\Sheets\Surface Treatment 2\20-13\03 ST2-20-13 01.dwg 3/24/2015 7:47:10 AM RYAN

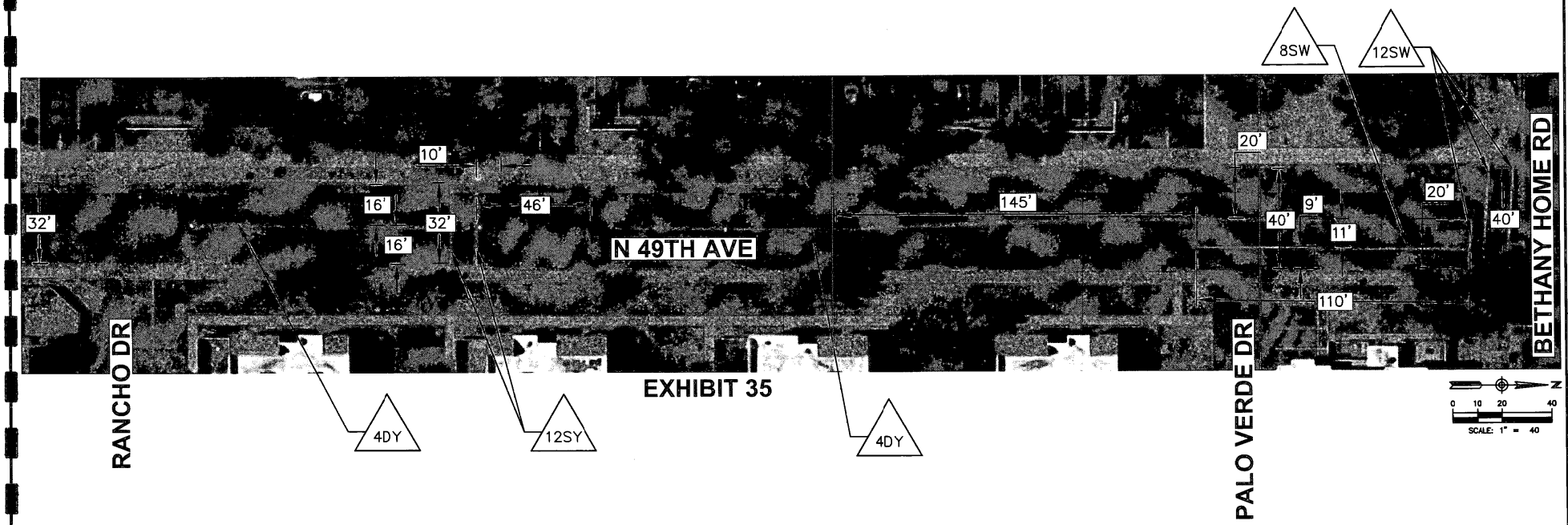

EXHIBIT 35

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

811
Know what's **below.**
Call before you dig.

CITY OF GLENDALE
PROJECT NO. 141514
SLURRY SEAL PHASE 2

CITY OF GLENDALE
ENGINEERING DEPARTMENT
5850 W. GLENDALE AVE.
GLENDALE, ARIZONA 85301 (623) 930-3630

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602.263.1177
www.ritochpowell.com

RPA

2014/2015 PAVEMENT MANAGEMENT PROGRAM
N 49TH AVE
RNACHO DR - BETHANY HOME RD

DRAWING
ST-02

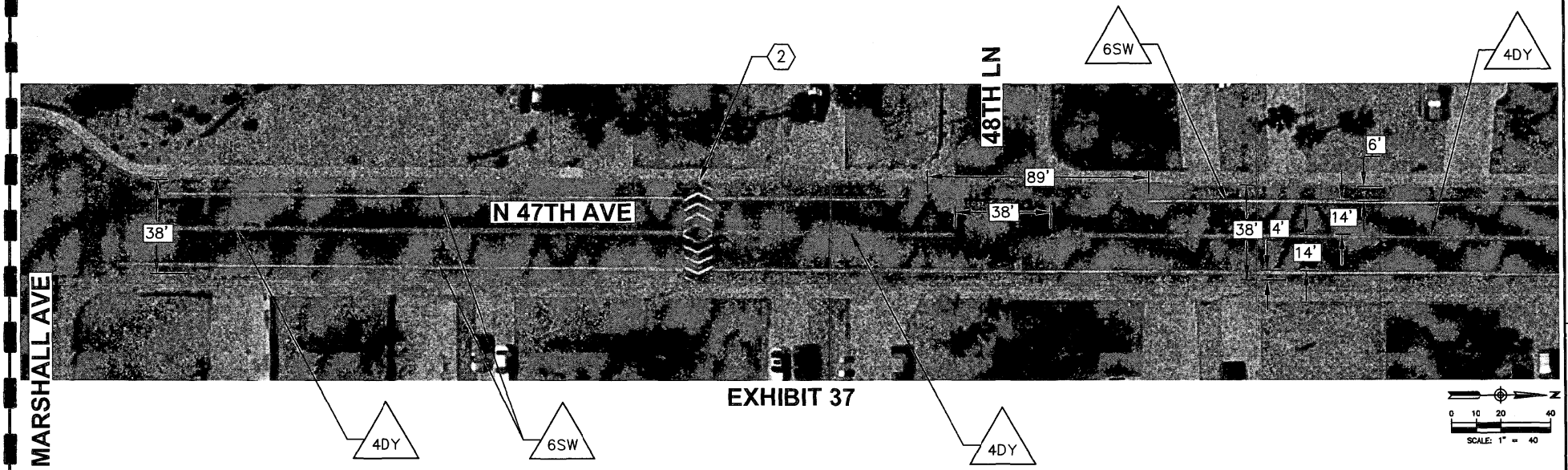
MAP
EXHIBIT 35

DRAWN	CHECKED
AS/CG/SK	RS/TB

DATE
MAR 2015

SHEET
04 OF 50

P:\Projects\2014\214089 - City of Glendale FY 2014 - 2015 Pavement Pres\CAD Files\Sheets\Surface Treatment 2\20-17\04 ST2-20-17 01.dwg 3/24/2015 7:47:19 AM RYAN



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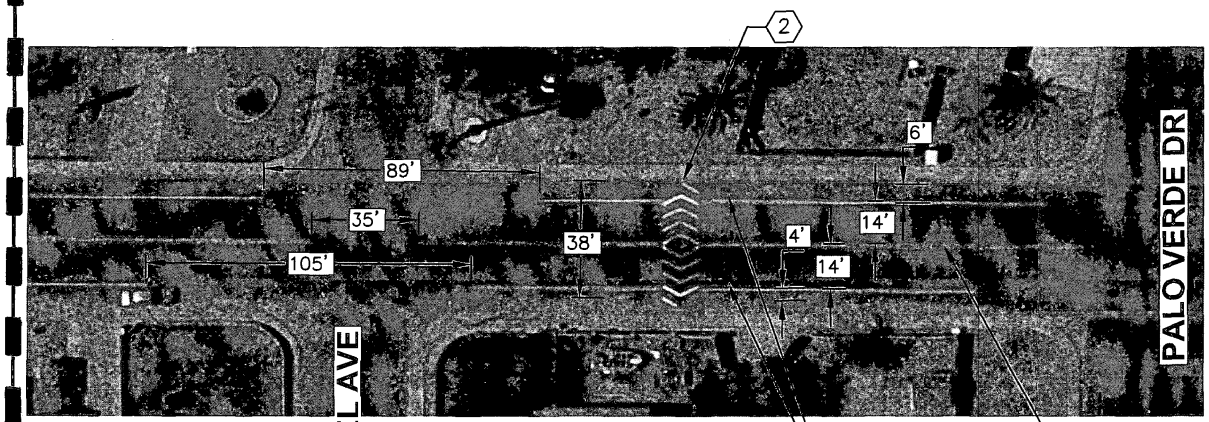

EXHIBIT 37

NOTE:
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Know what's **below.**
Call before you dig.

CITY OF GLENDALE
PROJECT NO. 141514
SLURRY SEAL PHASE 2

CITY OF GLENDALE
ENGINEERING DEPARTMENT
5850 W. GLENDALE AVE.
GLENDALE, ARIZONA 85301 (623) 930-3630

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www.ritochpowell.com

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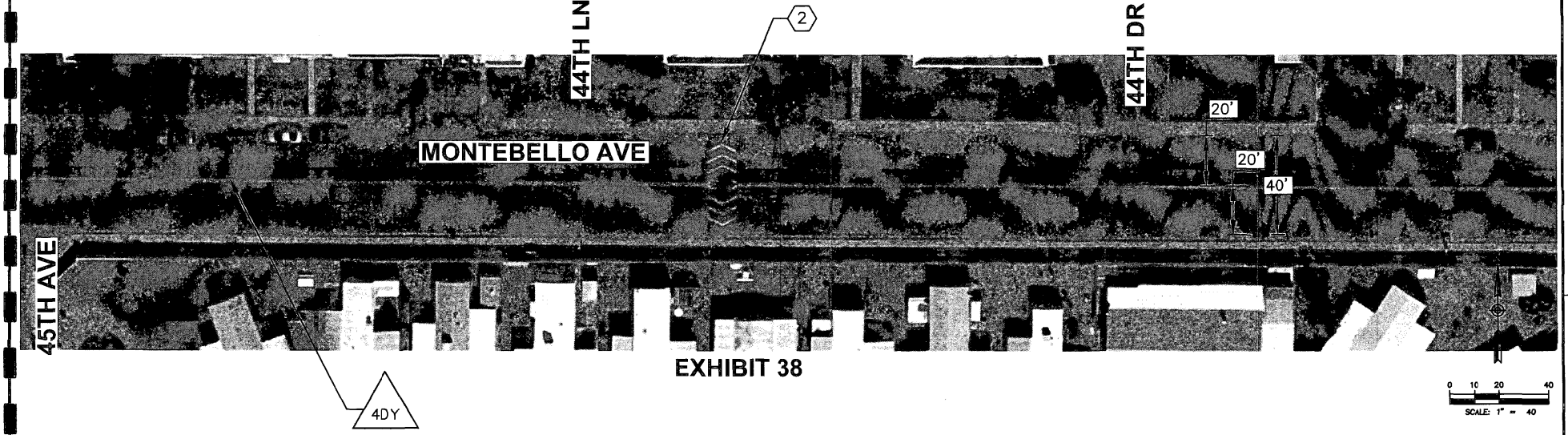
2014/2015 PAVEMENT MANAGEMENT PROGRAM
N 47TH AVE
MARSHALL AVE - PALO VERDE DR

DRAWING
ST-03
MAP
EXHIBIT 37
DRAWN AS/CG/SK
CHECKED RS/TB
DATE MAR 2015
SHEET 05 OF 50

P:\Projects\2014\2014089 - City of Glendale FY 2014 - 2015 Pavement Pres\CAD Files\Sheets\Surface Treatment 2\20-17\05 ST2-20-17 02.dwg 3/24/2015 7:47:30 AM RYAN



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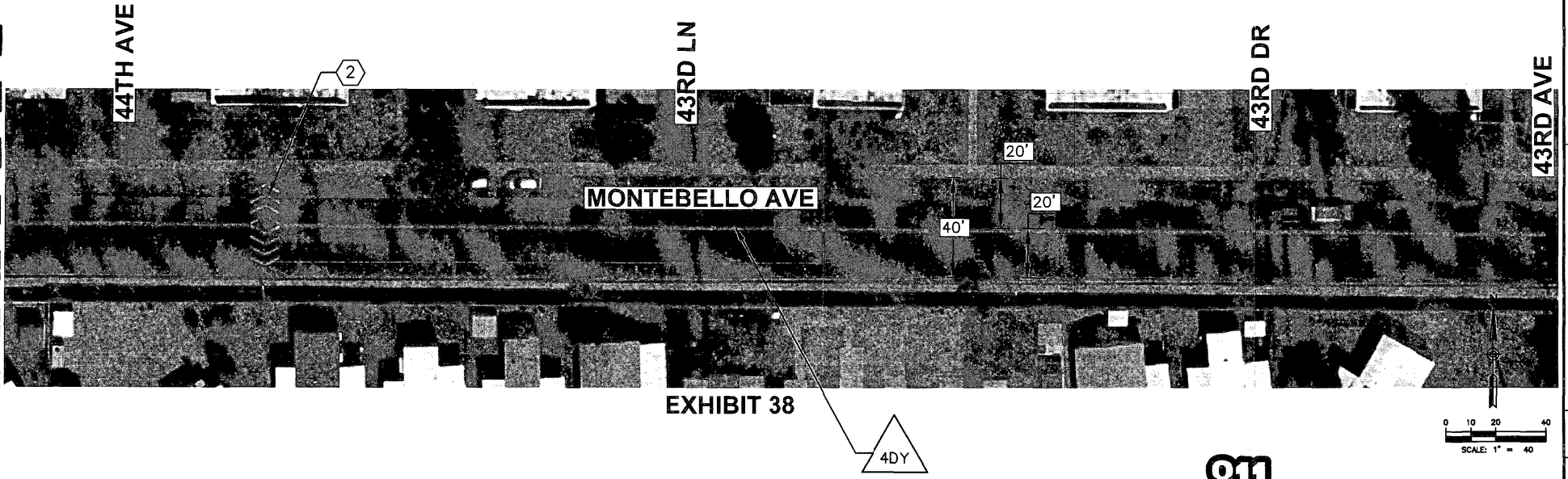

EXHIBIT 38

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

811
Know what's **below.**
Call before you dig.

CITY OF GLENDALE
PROJECT NO. 141514
SLURRY SEAL PHASE 2

CITY OF GLENDALE
ENGINEERING DEPARTMENT
5850 W. GLENDALE AVE.
GLENDALE, ARIZONA 85301 (623) 930-3630

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www.ritochpowell.com

RPA

2014/2015 PAVEMENT MANAGEMENT PROGRAM
MONTEBELLO AVE
45TH AVE - 43RD AVE

DRAWING
ST-04

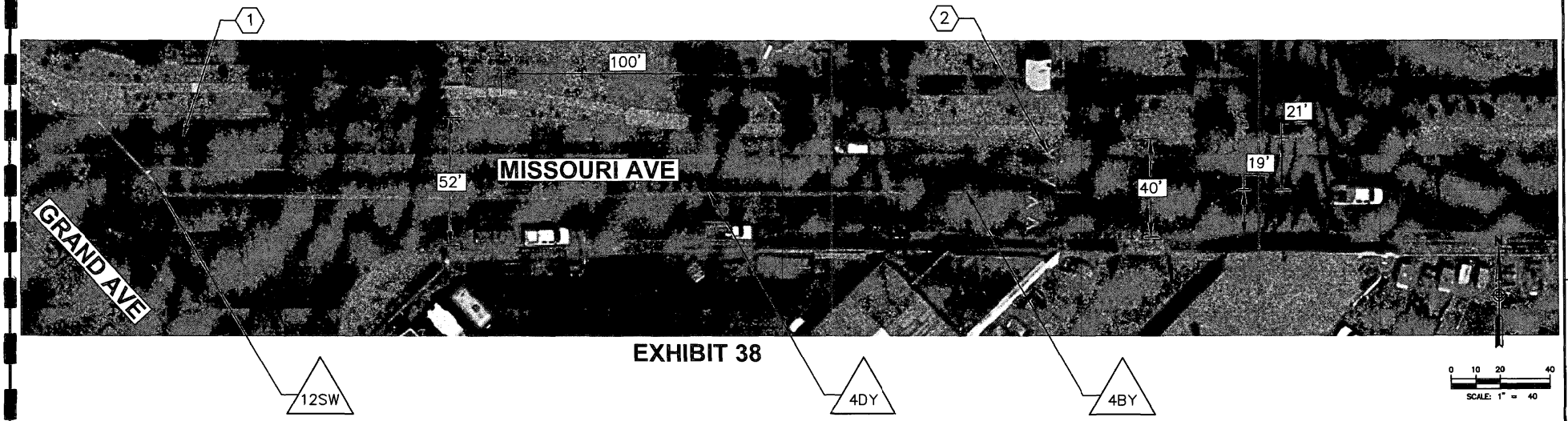
MAP
EXHIBIT 38/39

DRAWN AS/CG/SK | CHECKED RS/TB

DATE
MAR 2015

SHEET
06 OF 50

P:\Projects\2014\2140869 - City of Glendale FY 2014 - 2015 Pavement Pres\CAD Files\Sheets\Surface Treatment 2020-17\06 ST2-20-17 03.dwg 3/24/2015 7:47:39 AM RYAN



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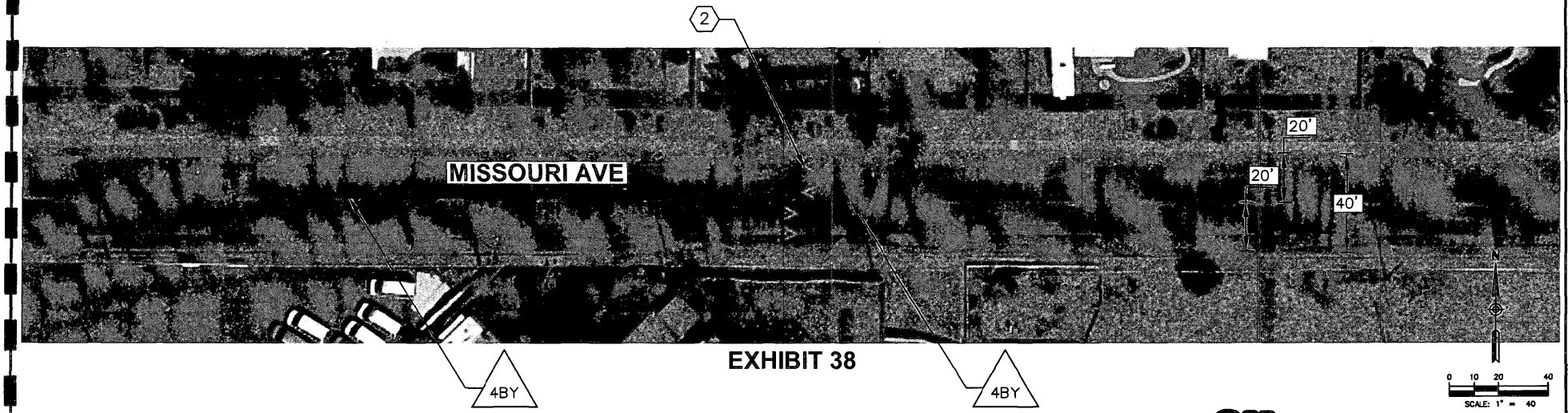

EXHIBIT 38

NOTE:
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CITY OF GLENDALE
PROJECT NO. 141514
SLURRY SEAL PHASE 2

CITY OF GLENDALE
ENGINEERING DEPARTMENT
5850 W. GLENDALE AVE.
GLENDALE, ARIZONA 85301 (623) 930-3630

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2014/2015 PAVEMENT MANAGEMENT PROGRAM
MISSOURI AVE
GRAND AVE - 45TH AVE

DRAWING ST-05
MAP EXHIBIT 38/39
DRAWN AS/CG/SK
CHECKED RS/TB
DATE MAR 2015
SHEET 07 OF 50

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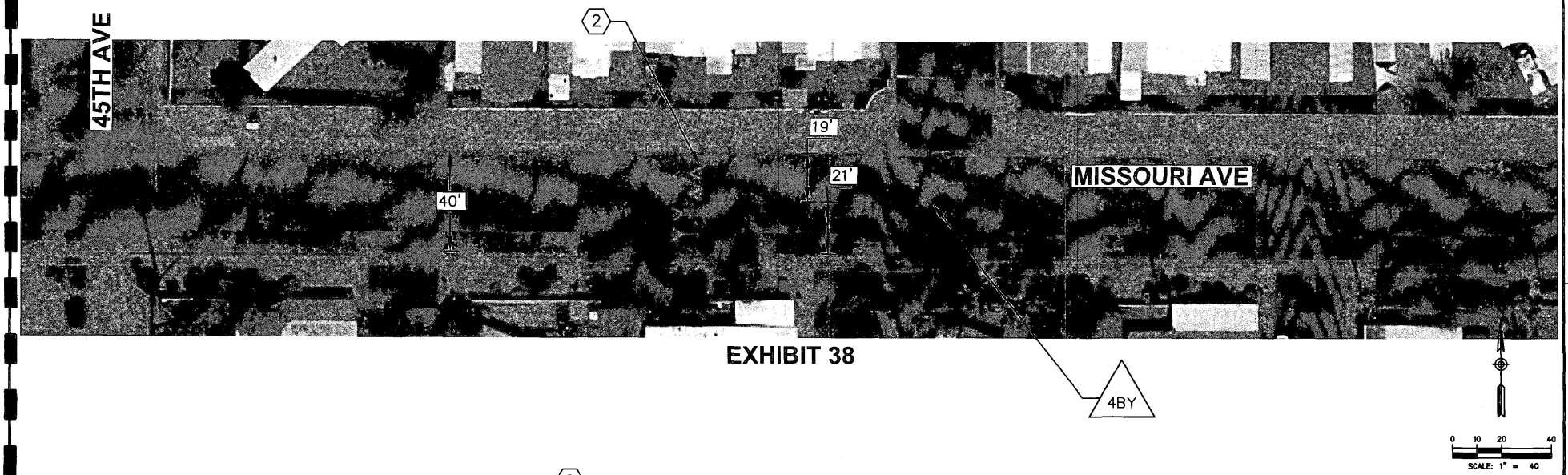

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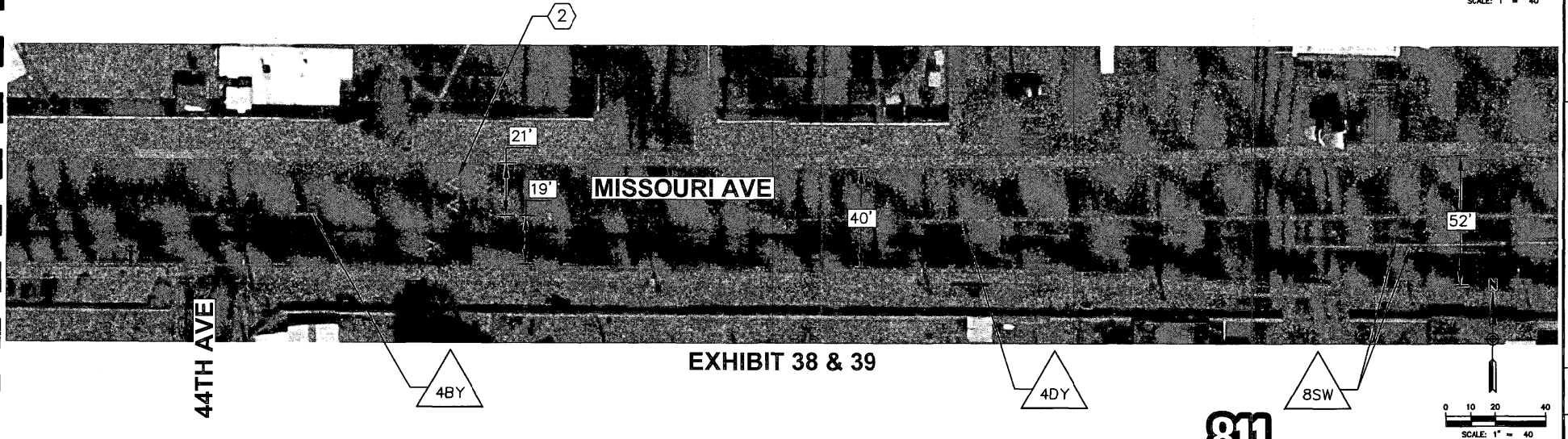

EXHIBIT 38 & 39

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CITY OF GLENDALE
PROJECT NO. 141514
SLURRY SEAL PHASE 2

CITY OF GLENDALE
ENGINEERING DEPARTMENT
5850 W. GLENDALE AVE
GLENDALE, ARIZONA 85301 (623) 930-3630

RITOCH-POWELL & Associates
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www.ritochpowell.com

RPA

2014/2015 PAVEMENT MANAGEMENT PROGRAM
MISSOURI AVE
45TH AVE - 43RD AVE

DRAWING ST-06
MAP EXHIBIT 38/39
DRAWN AS/CG/SK
CHECKED RS/TB
DATE MAR 2015
SHEET 08 OF 50

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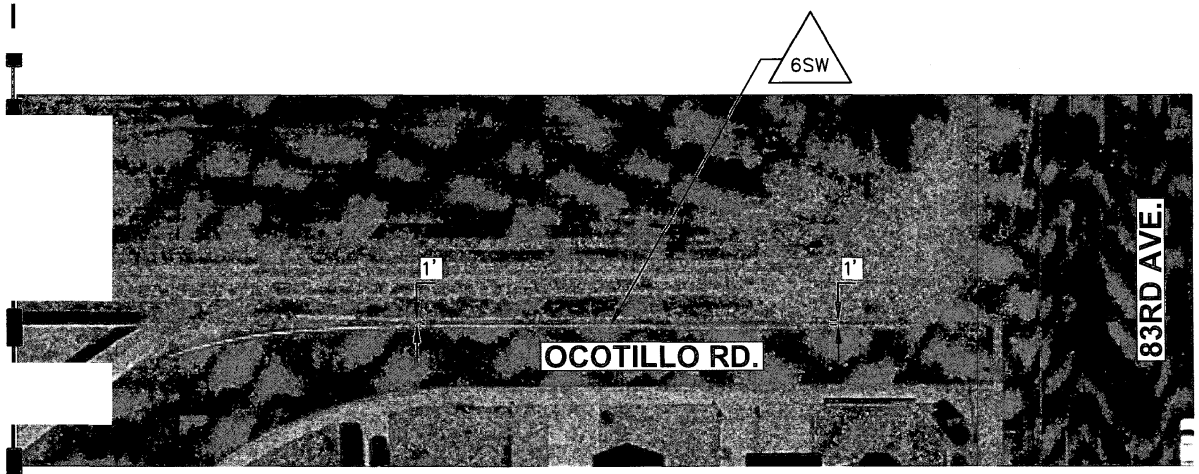

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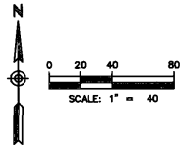

NOTE:
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Know what's **below.**
Call before you dig.

CITY OF GLENDALE
PROJECT NO. 141514
SLURRY SEAL PHASE 2

CITY OF GLENDALE
ENGINEERING DEPARTMENT
5850 W. GLENDALE AVE.
GLENDALE, ARIZONA 85301 (623) 930-3630

RPA
RITOCH-POWELL & Associates
602.263.1177
www.ritochpowell.com

2014/2015 PAVEMENT MANAGEMENT PROGRAM
83RD AVENUE
83RD AVE AND OCOTILLO RD

DRAWING
ST-08
MAP
EXHIBIT 28
DRAWN AS/CG/SK
CHECKED RS/TB
DATE
MAR 2015
SHEET
10 OF 50

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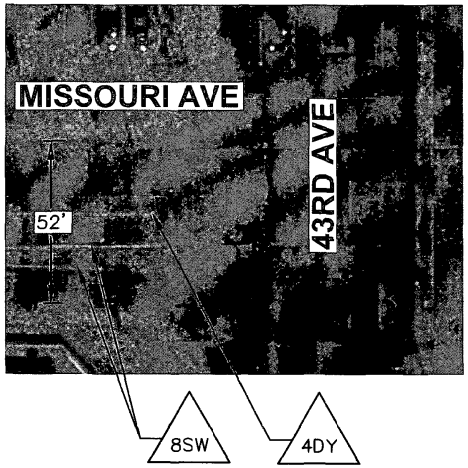
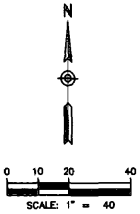
EXHIBIT 39





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

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PROJECT NO. 141514
SLURRY SEAL PHASE 2

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2014/2015 PAVEMENT MANAGEMENT PROGRAM
MISSOURI AVE
43RD AVE

DRAWING ST-07
MAP EXHIBIT 39
DRAWN AS/CG/SK | CHECKED RS/TB
DATE MAR 2015
SHEET 09 OF 50

P:\Projects\2014\2-14089 - City of Glendale FY 2014 - 2015 Pavement Preservation\CAD Files\Sheets\Surface Treatment 2015\141508 ST2-2015-17_05.dwg 3/24/2015 7:48:08 AM RYAN

EXHIBIT 31

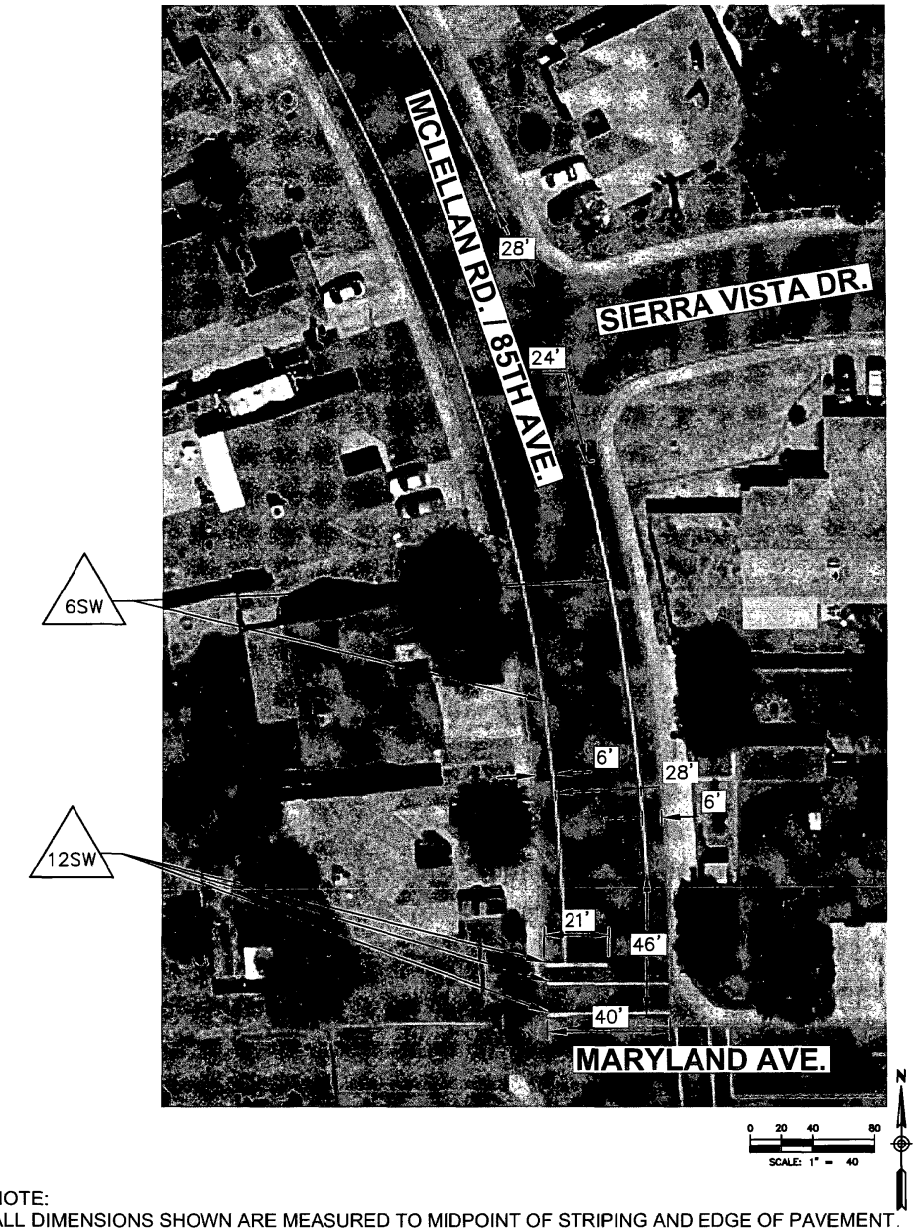
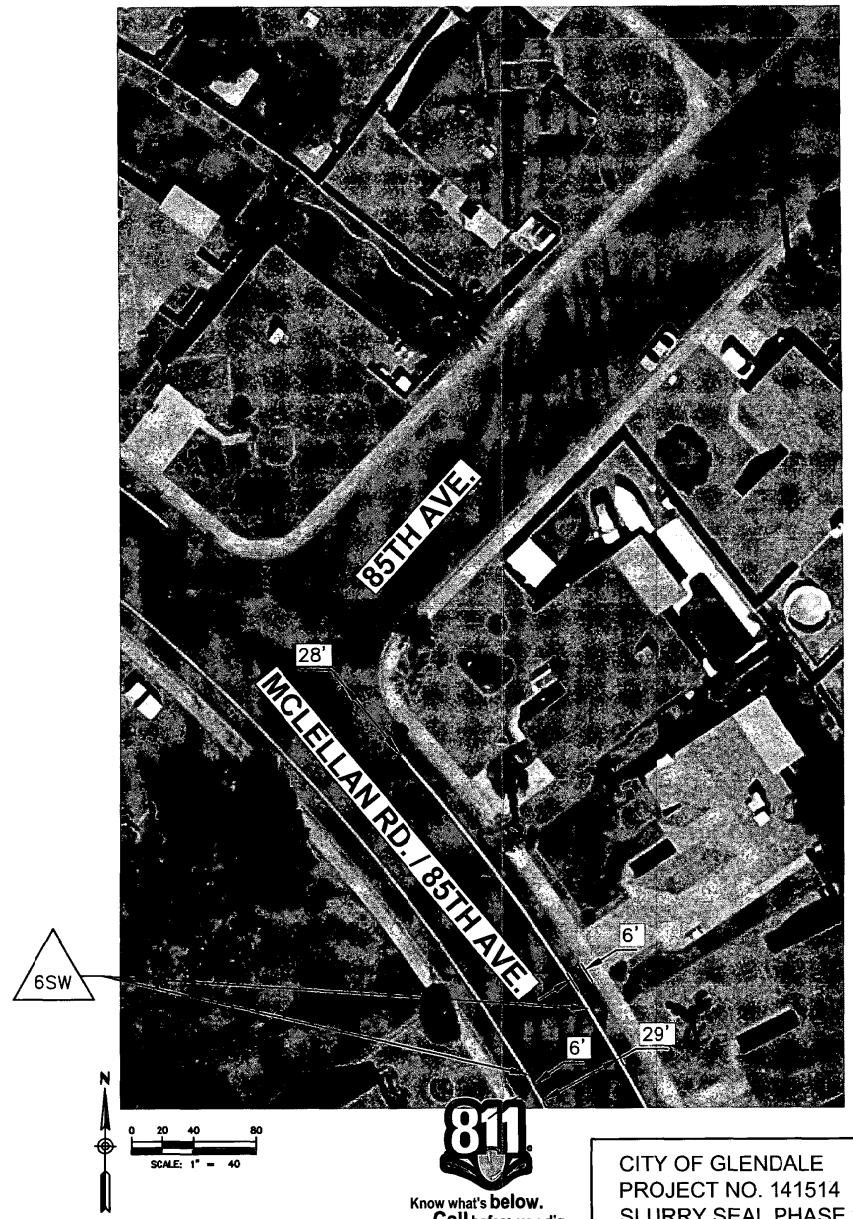


EXHIBIT 31



NOTE:
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2014/2015 PAVEMENT MANAGEMENT PROGRAM
MCLELLAN RD./85TH AVE.
MARYLAND AVE. - 85TH AVE.

DRAWING
ST-09

MAP
Exhibit 31

DRAWN	CHECKED
AS/CG/SK	RS/TB

DATE
MAR 2015

SHEET
11 OF 50

P:\Projects\2014\214089 - City of Glendale FY 2014 - 2015 Pavement Pres\CAD Files\Sheets\Surface Treatment 2022-7111 ST2-22-7 002.dwg 3/24/2015 7:48:30 AM RYAN

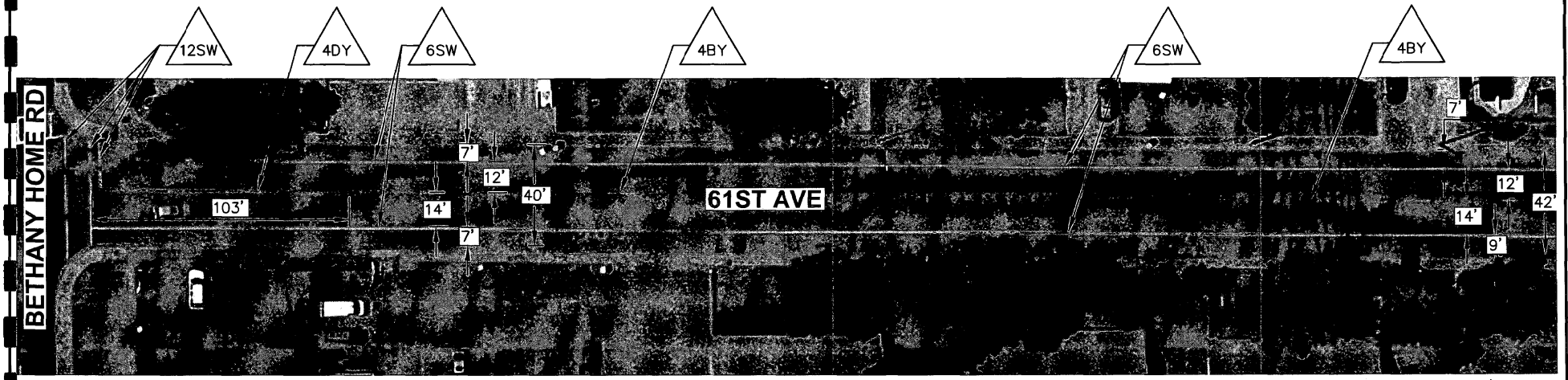

EXHIBIT 34

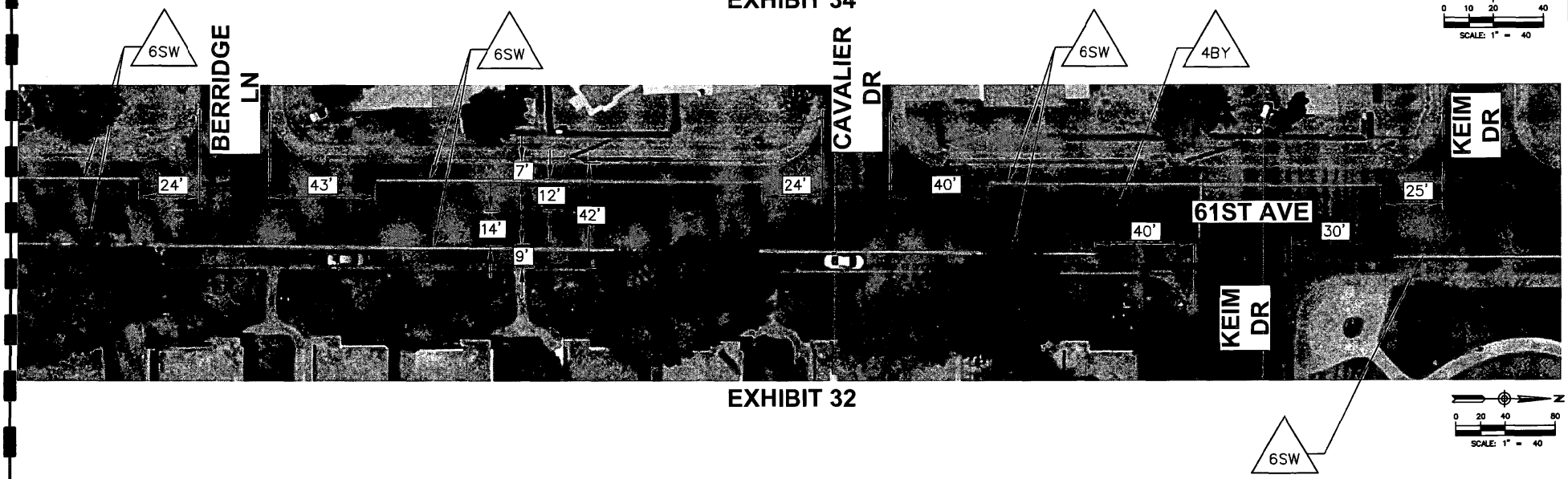

EXHIBIT 32

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

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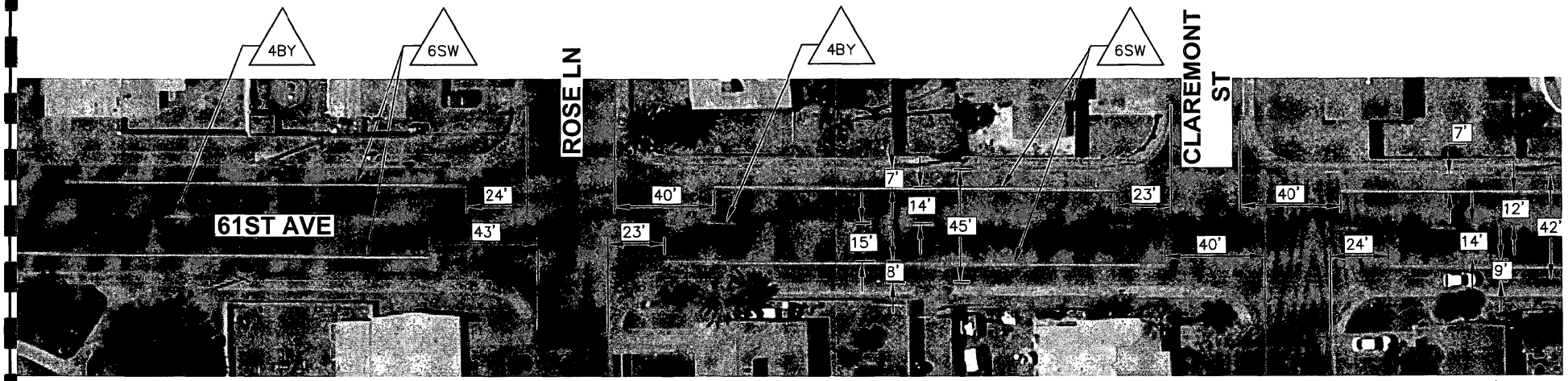
2014/2015 PAVEMENT MANAGEMENT PROGRAM
61ST AVE.
BETHANY HOME RD. - MARYLAND AVE.

DRAWING ST-10
MAP Exhibit 32 & 34
DRAWN AS/CG/SK
CHECKED RS/TB
DATE MAR 2015
SHEET 12 OF 50

P:\Projects\2014\214089 - City of Glendale FY 2014 - 2015 Pavement Pres\CAD Files\Sheets\Surface Treatment 2\22-13\12 ST2-22-13 01.dwg 3/24/2015 7:48:41 AM RYAN



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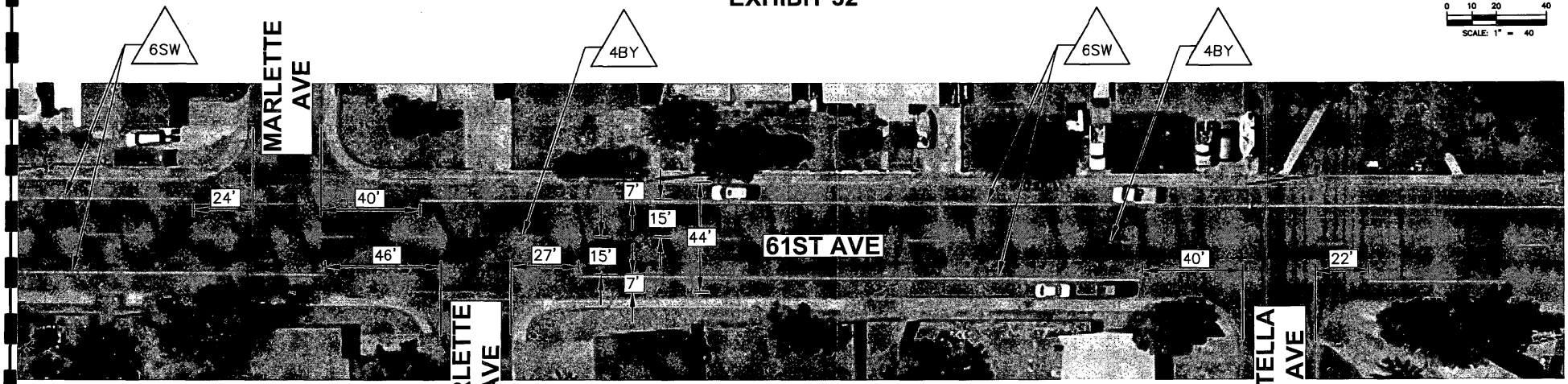

EXHIBIT 32

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

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DRAWING ST-11
MAP Exhibit 32
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DATE MAR 2015
SHEET 13 OF 50

P:\Projects\2014\2-14060 - City of Glendale FY 2014 - 2015 Pavement Preis\CAD Files\Sheets\Surface Treatment 2014-15\13_ST-22-15_10.dwg 3/4/2015 7:45:50 AM RYAN

EXHIBIT 32

0 10 20 40 N
SCALE: 1" = 40

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DRAWING ST-12
MAP Exhibit 32
DRAWN AS/CG/SK | CHECKED RS/TB
DATE MAR 2015
SHEET 14 OF 50

P:\Projects\2014\214089 - City of Glendale FY 2014 - 2015 Pavement Pres\CAD Files\Sheets\Surface Treatment 222-13\14 ST12-22-13 03.dwg 3/24/2015 7:48:00 AM RYAN

EXHIBIT 29

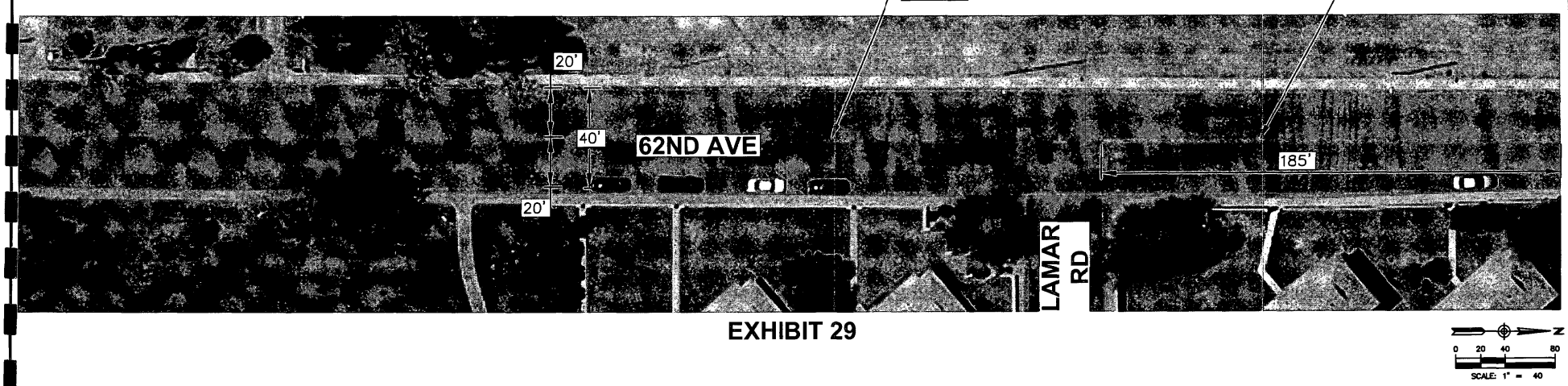

EXHIBIT 29

NOTE:
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62ND AVE.
OCOTILLO RD. - GLENDALE AVE.

DRAWING ST-13
MAP Exhibit 29
DRAWN AS/CG/SK | CHECKED RS/TB
DATE MAR 2015
SHEET 15 OF 50

P:\Projects\2014\14068 - City of Glendale FY 2014 - 2015 Pavement Fries\CAD Files\Sheets\Surface Treatment 2014-15\15_ST-13_01.dwg 3/24/2015 7:48:1 AM RYAN

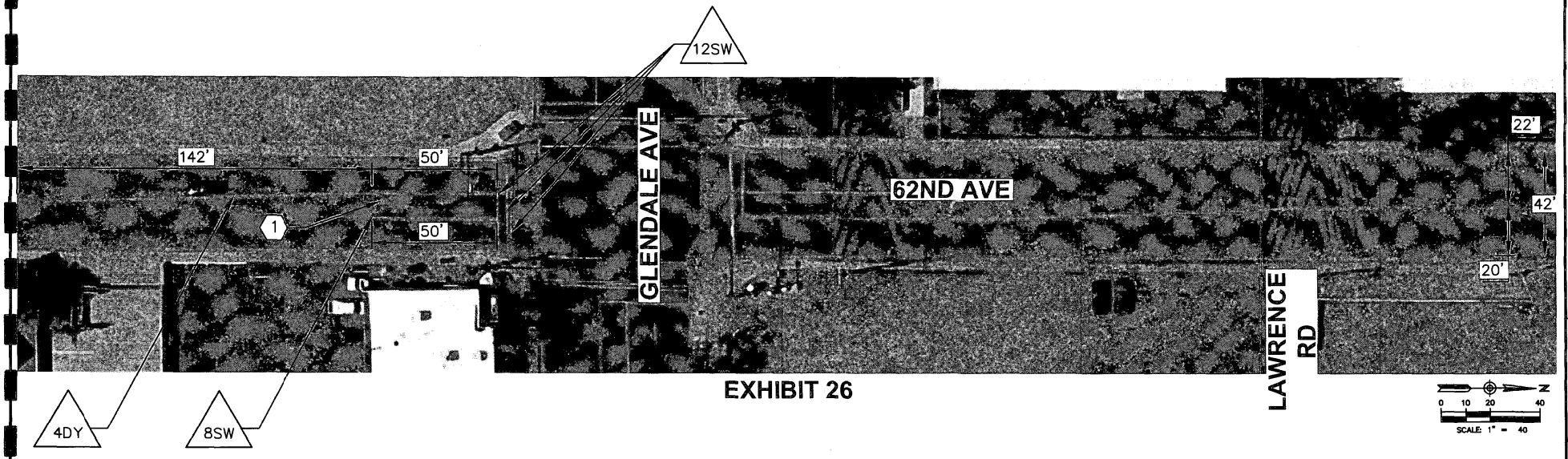

EXHIBIT 26

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

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DRAWING
ST-14

MAP
Exhibit 26

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AS/CG/SK	RS/TB

DATE
MAR 2015

SHEET
16 OF 50

P:\Projects\2014\2140889 - City of Glendale FY 2014 - 2015 Pavement Pres\CAD Files\Sheets\Surface Treatment 2\22-13\16 ST2-22-13 05.dwg 3/24/2015 7:49:20 AM RYAN

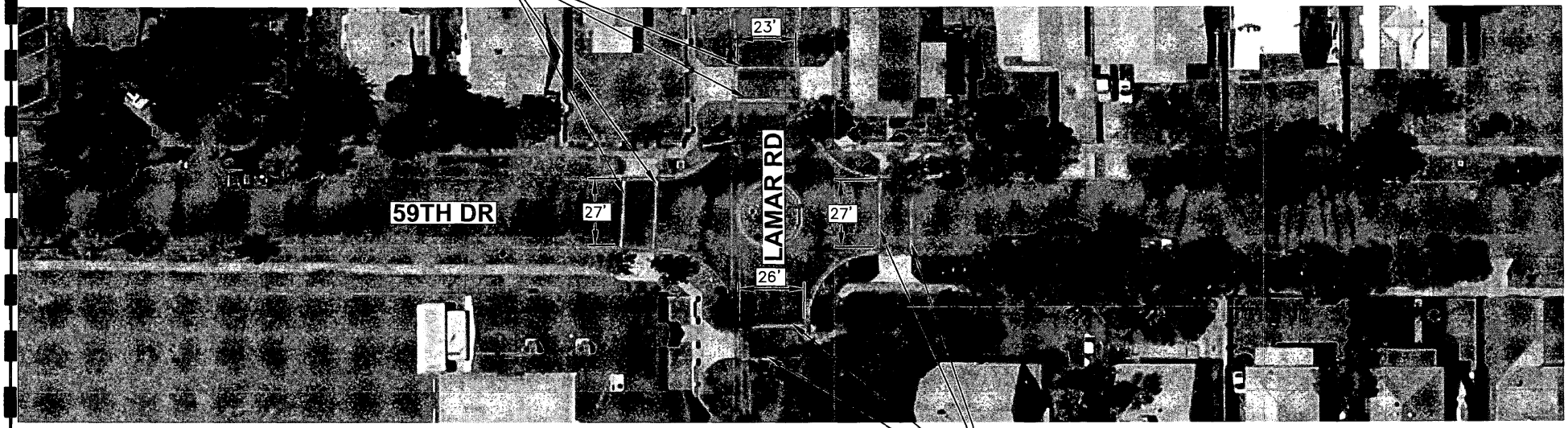

EXHIBIT 29

N
0 10 20 40
SCALE: 1" = 40

NOTE:
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59TH DR.
59TH DR. & LAMAR RD.

DRAWING
ST-15

MAP
Exhibit 29

DRAWN	CHECKED
AS/CG/SK	RS/TB

DATE
MAR 2015

SHEET
17 OF 50

P:\Projects\2014\141499 - City of Glendale FY 2014 - 2015 Pavement Preservation\CAD Files\Sheets\Surface Treatment\ST-15.dwg 3/24/2015 7:48:29 AM RYAN

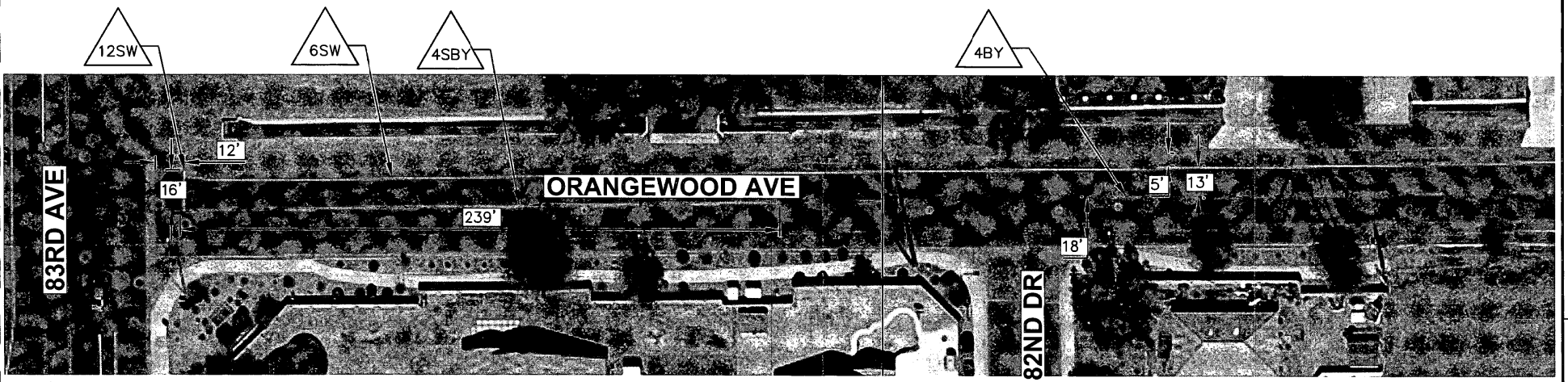

EXHIBIT 22

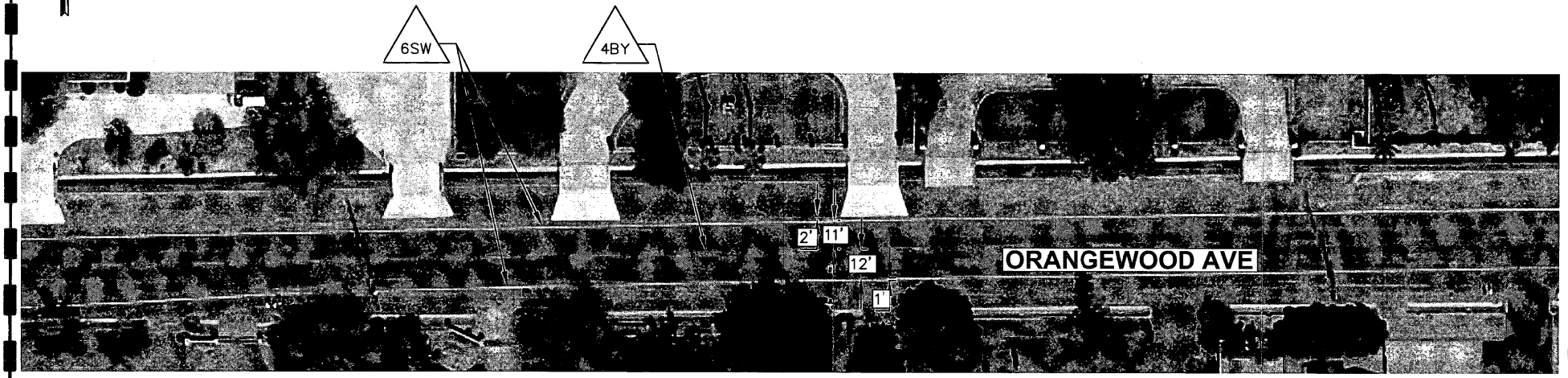

EXHIBIT 23

NOTE:
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ORANGEWOOD AVE.
83RD AVE. - 75TH AVE.

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MAP Exhibit 22 & 23
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DATE MAR 2015
SHEET 18 OF 50

P:\Projects\2014\214089 - City of Glendale FY 2014 - 2015 Pavement Pres\CAD Files\Sheets\Surface Treatment 2024-9\18 ST2-24-09 01.dwg 3/24/2015 7:49:40 AM RYAN

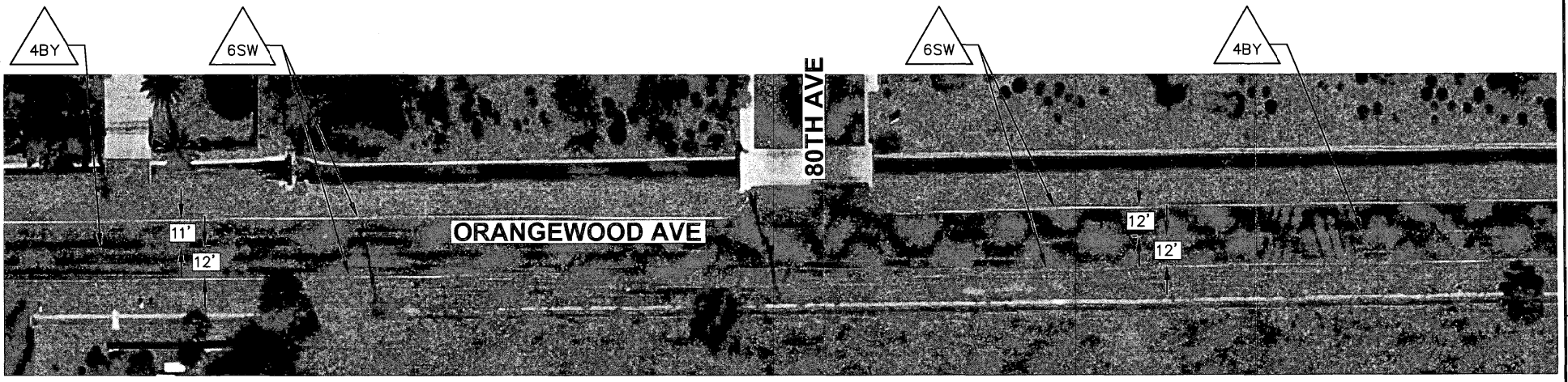

EXHIBIT 23

N

0 10 20 40
SCALE: 1" = 40

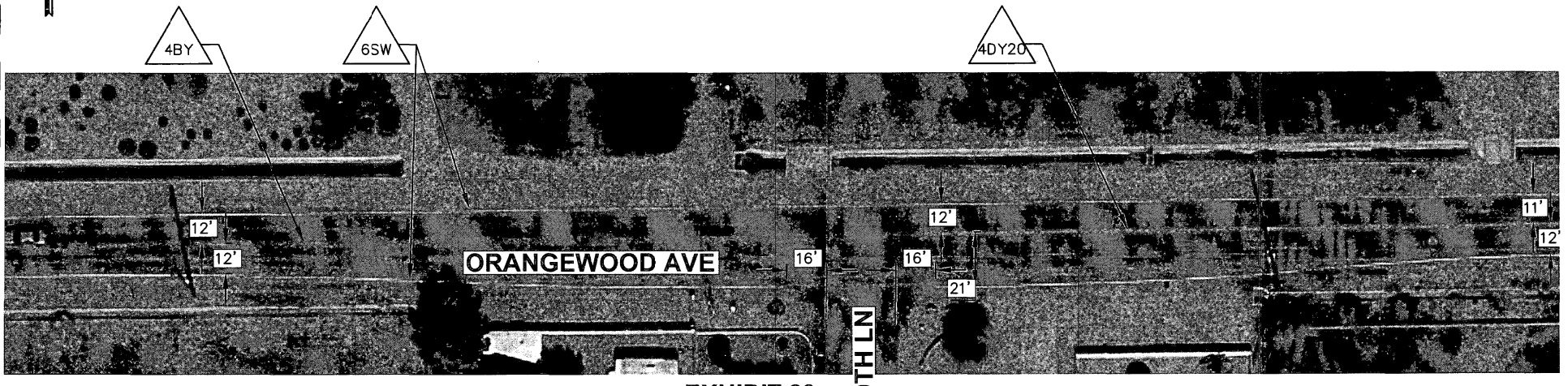

EXHIBIT 23

N

0 10 20 40
SCALE: 1" = 40

NOTE:
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83RD AVE. - 75TH AVE.

DRAWING
ST-17

MAP
Exhibit 23

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AS/CG/SK	RS/TB

DATE
MAR 2015

SHEET
19 OF 50

P:\Projects\2014\214089 - City of Glendale FY 2014 - 2015 Pavement Pres\CAD Files\Sheets\Surface Treatment 2024-9\19 ST2-24-09 02.dwg 3/24/2015 7:49:49 AM RYAN

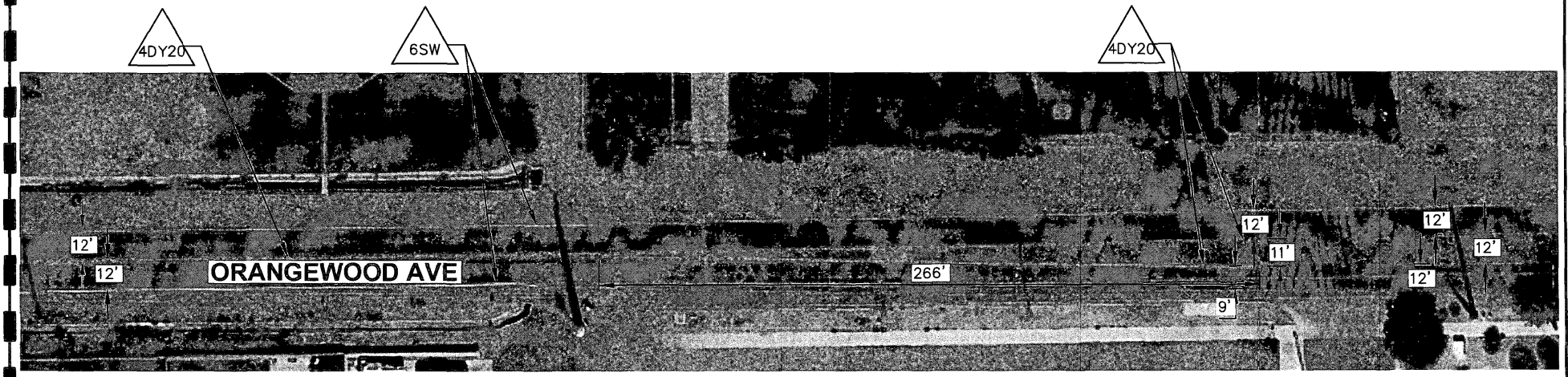

EXHIBIT 23

N

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SCALE: 1" = 40

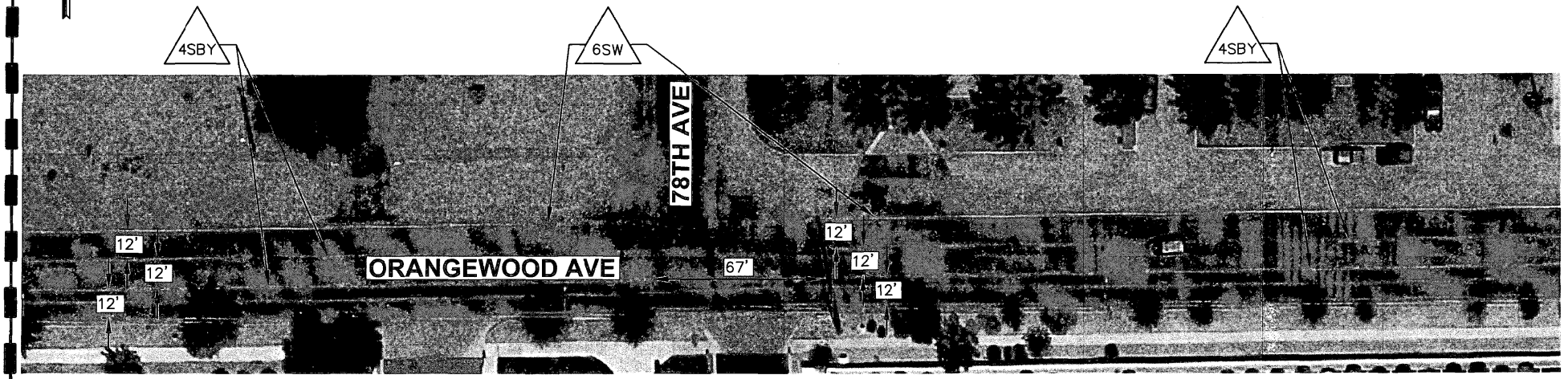

EXHIBIT 23

N

0 10 20 40
SCALE: 1" = 40

NOTE:
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2014/2015 PAVEMENT MANAGEMENT PROGRAM
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DRAWING
ST-18

MAP
Exhibit 23

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AS/CG/SK	RS/TB

DATE
MAR 2015

SHEET
20 OF 50

P:\Projects\2014\214089 - City of Glendale FY 2014 - 2015 Pavement Pres\CAD Files\Sheets\Surface Treatment 2\24-0\20 ST2-24-09 03.dwg 3/24/2015 7:49:59 AM RYAN

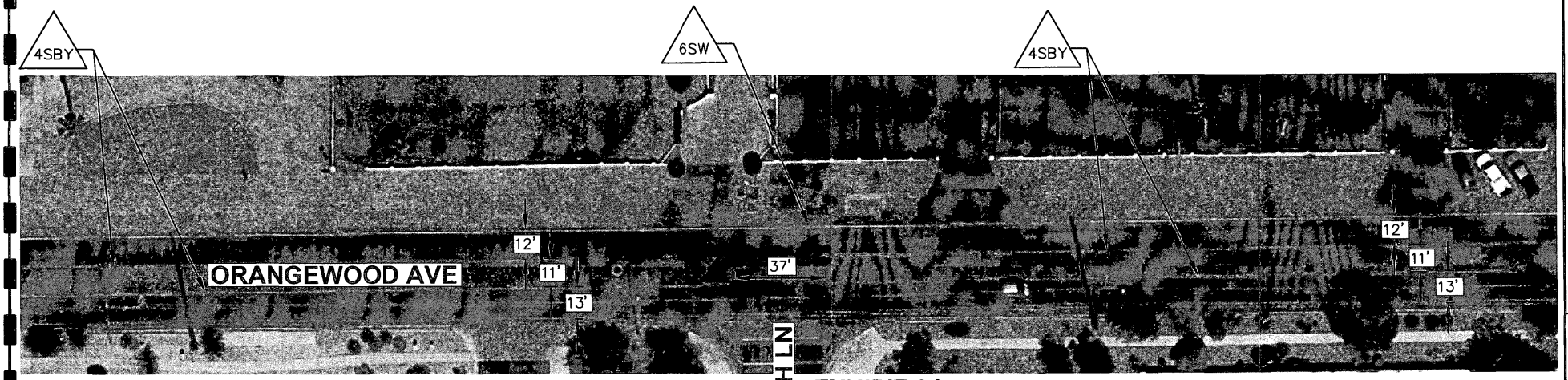

EXHIBIT 24

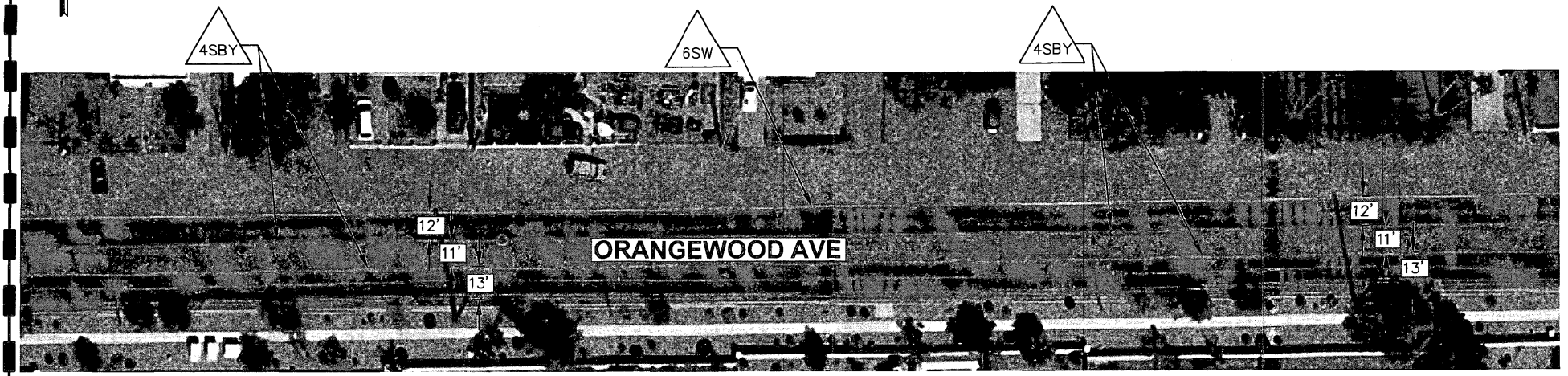

EXHIBIT 24

N

0 10 20 40
SCALE: 1" = 40

NOTE:
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83RD AVE. - 75TH AVE.

DRAWING
ST-19

MAP
Exhibit 24

DRAWN	CHECKED
AS/CG/SK	RS/TB

DATE
MAR 2015

SHEET
21 OF 50

P:\Projects\2014\214089 - City of Glendale FY 2014 - 2015 Pavement Pres\CAD Files\Sheets\Surface Treatment 2014-9021 ST2-24-09 04.dwg 3/24/2015 7:50:10 AM RYAN

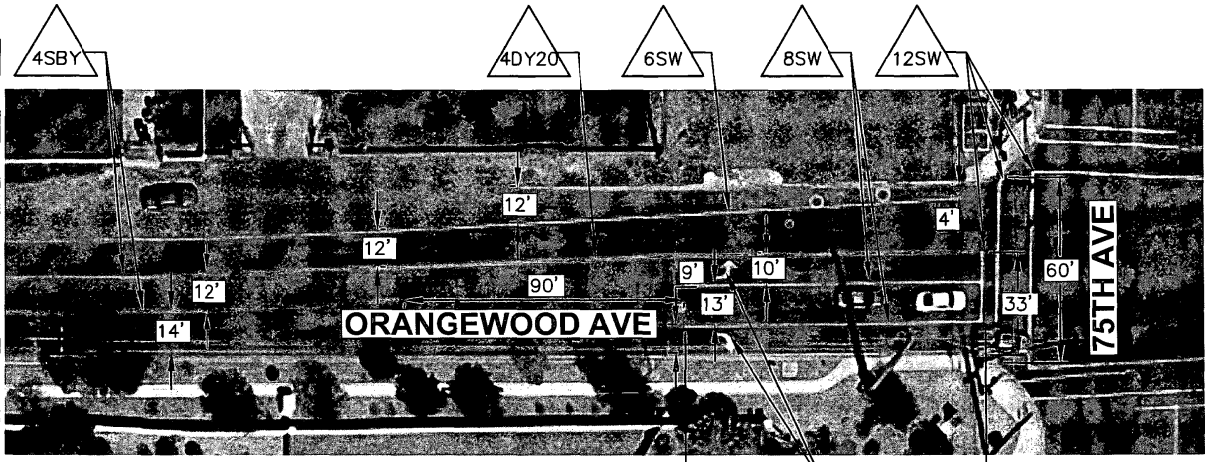
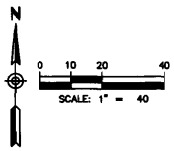


EXHIBIT 25



NOTE:
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DRAWING ST-20
MAP Exhibit 25
DRAWN AS/CG/SK | CHECKED RS/TB
DATE MAR 2015
SHEET 22 OF 50

P:\Projects\2014\14053 - City of Glendale FY 2014 - 2015 Pavement Fres\CAD Files\Sheets\Surface Treatment 204-922 ST2.24-09 05.dwg 3/24/2015 7:50:19 AM RYN

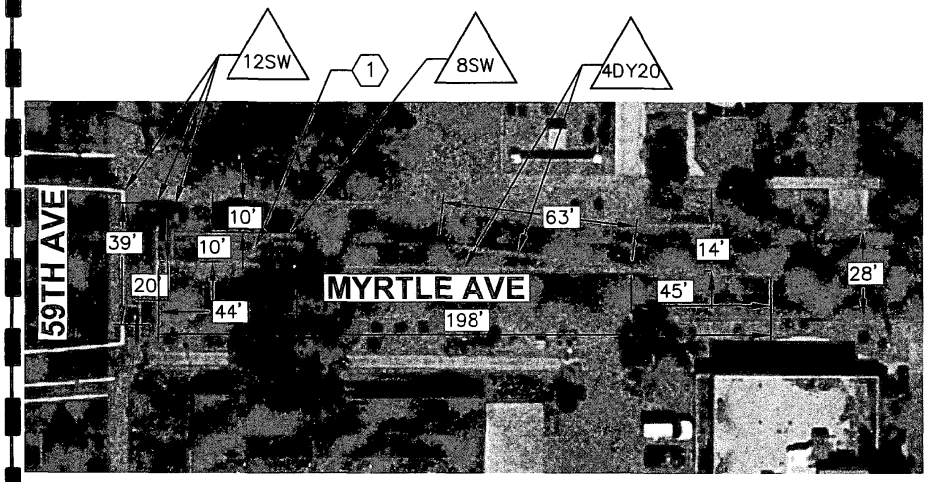

EXHIBIT 27

N

SCALE: 1" = 40

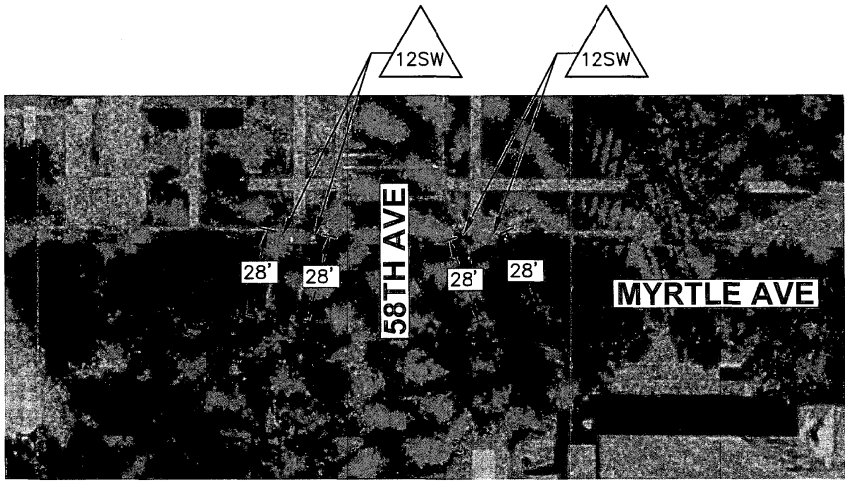

EXHIBIT 27

N

SCALE: 1" = 40

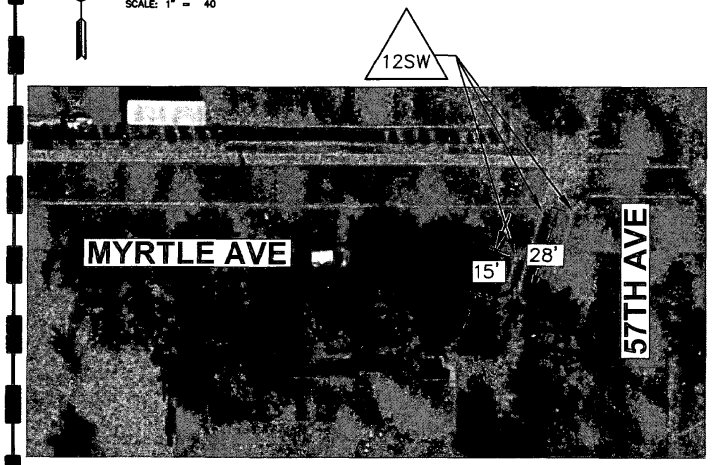

EXHIBIT 27

N

SCALE: 1" = 40

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2014/2015 PAVEMENT MANAGEMENT PROGRAM
MYRTLE AVE.
59TH AVE. - 57TH AVE.

DRAWING ST-21
MAP Exhibit 27
DRAWN AS/CG/SK | CHECKED RS/TB
DATE MAR 2015
SHEET 23 OF 50

P:\Projects\2014\141489 - City of Glendale FY 2014 - 2015 Pavement Pres\CAD Files\Sheets\Surface Treatment 2224-1523 ST2.24-15 01.dwg 3/24/2015 7:50:30 AM RYAN

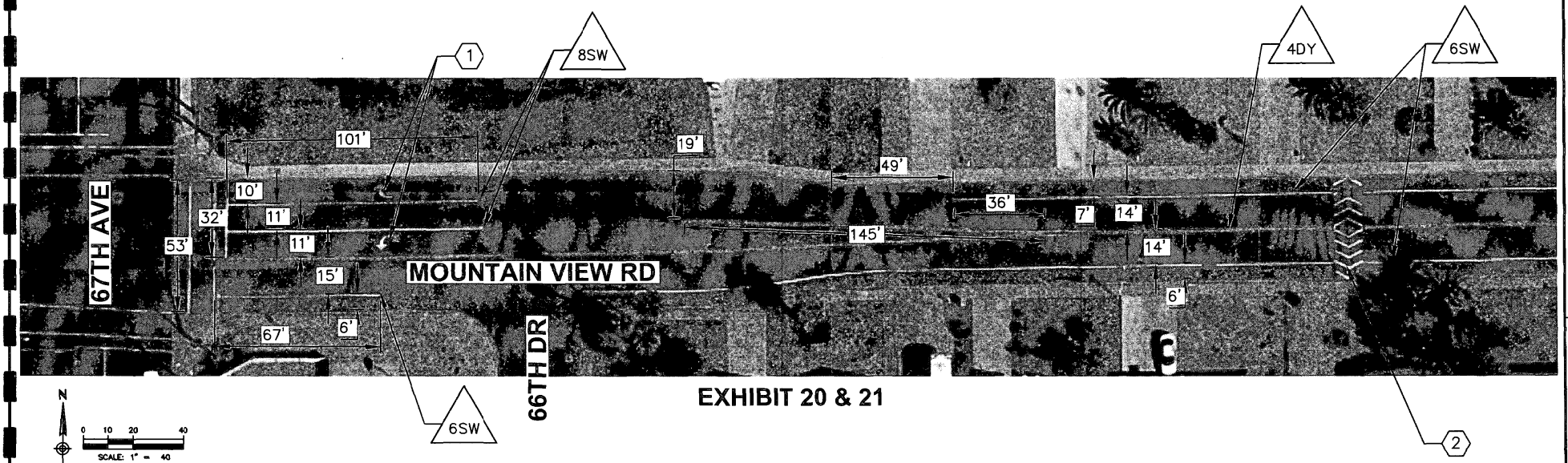

EXHIBIT 20 & 21

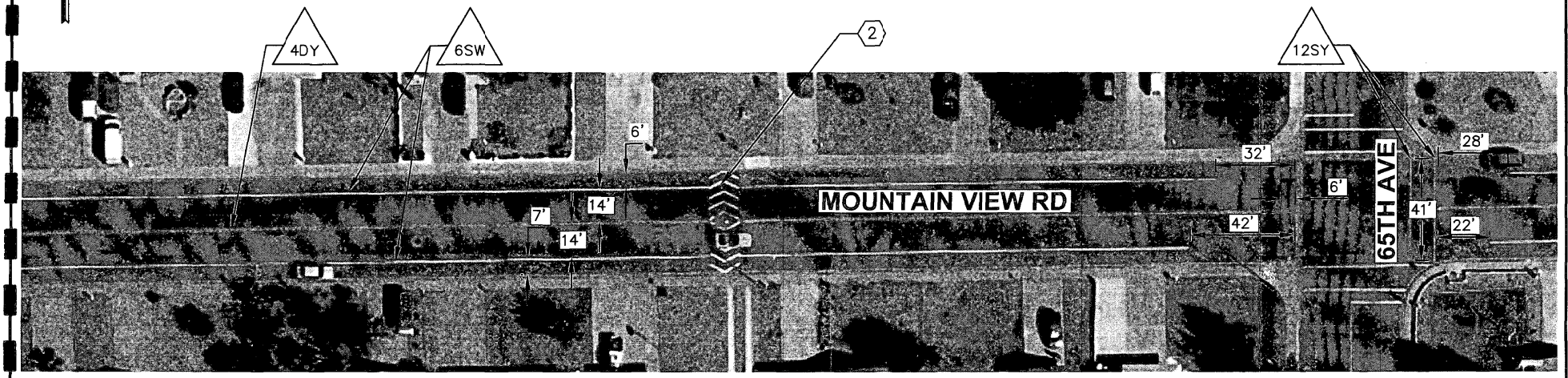

EXHIBIT 21

NOTE:
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2014/2015 PAVEMENT MANAGEMENT PROGRAM
MOUNTAIN VIEW RD.
67TH AVE. - 63RD AVE.

DRAWING ST-22
MAP Exhibit 20 & 21
DRAWN AS/CG/SK
CHECKED RS/TB
DATE MAR 2015
SHEET 24 OF 50

P:\Projects\2014\214089 - City of Glendale FY 2014 - 2015 Pavement Pres\CAD Files\Sheets\Surface Treatment 2\08-13\24 ST2-28-13 01.dwg 3/24/2015 7:50:40 AM RYAN

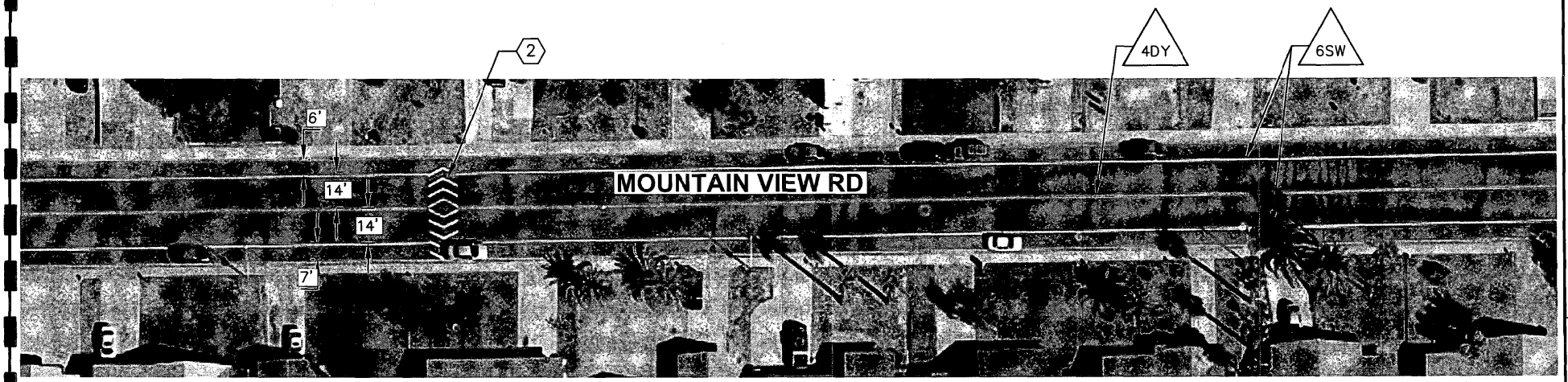

EXHIBIT 21

N

0 10 20 40
SCALE: 1" = 40

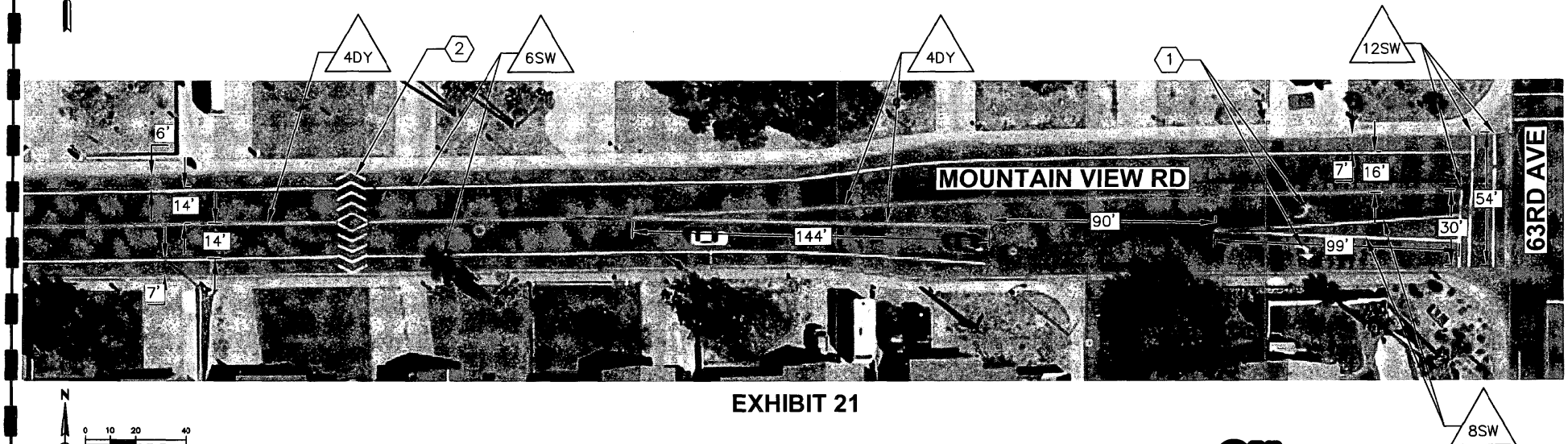

EXHIBIT 21

N

0 10 20 40
SCALE: 1" = 40

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

811
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PROJECT NO. 141514
SLURRY SEAL PHASE 2

CITY OF GLENDALE
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2014/2015 PAVEMENT MANAGEMENT PROGRAM
MOUNTAIN VIEW RD.
67TH AVE. - 63RD. AVE.

DRAWING
ST-23
MAP
Exhibit 21
DRAWN AS/CG/SK
CHECKED RS/TB
DATE MAR 2015
SHEET 25 OF 50

P:\Projects\2014\214089 - City of Glendale FY 2014 - 2015 Pavement Pres\CAD Files\Sheets\Surface Treatment 2\28-13\25 ST2-28-13 02.dwg 3/24/2015 7:50:49 AM RYAN

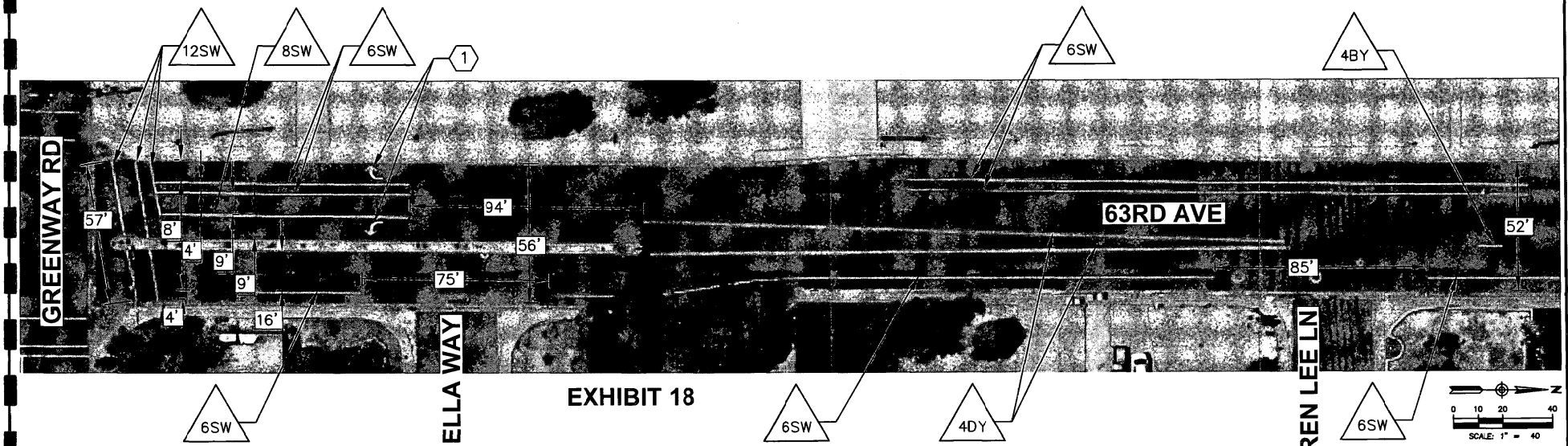

EXHIBIT 18

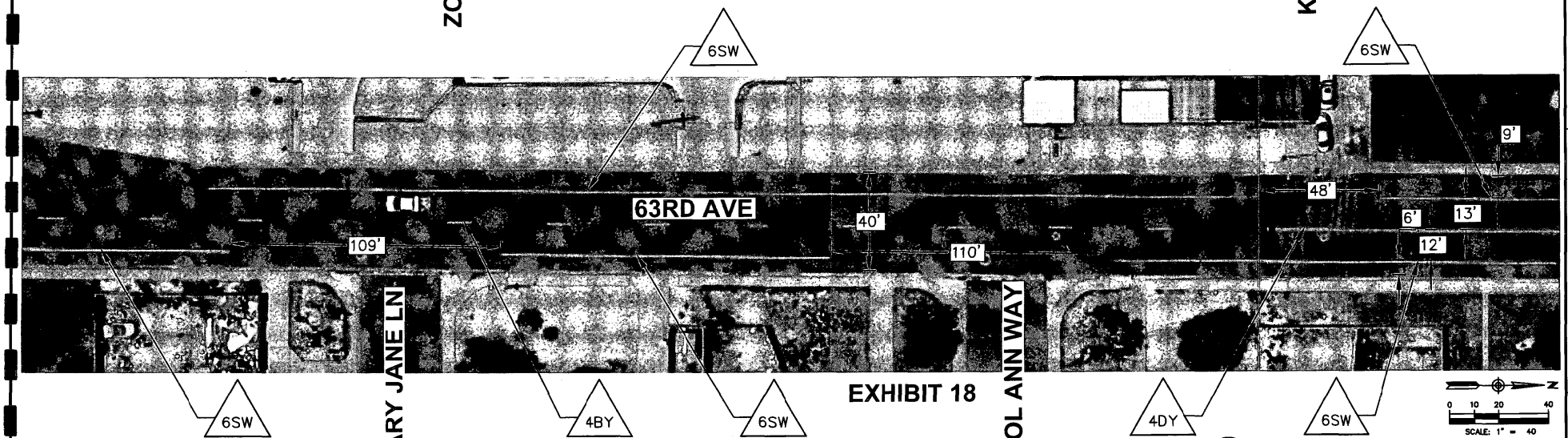

EXHIBIT 18

NOTE:
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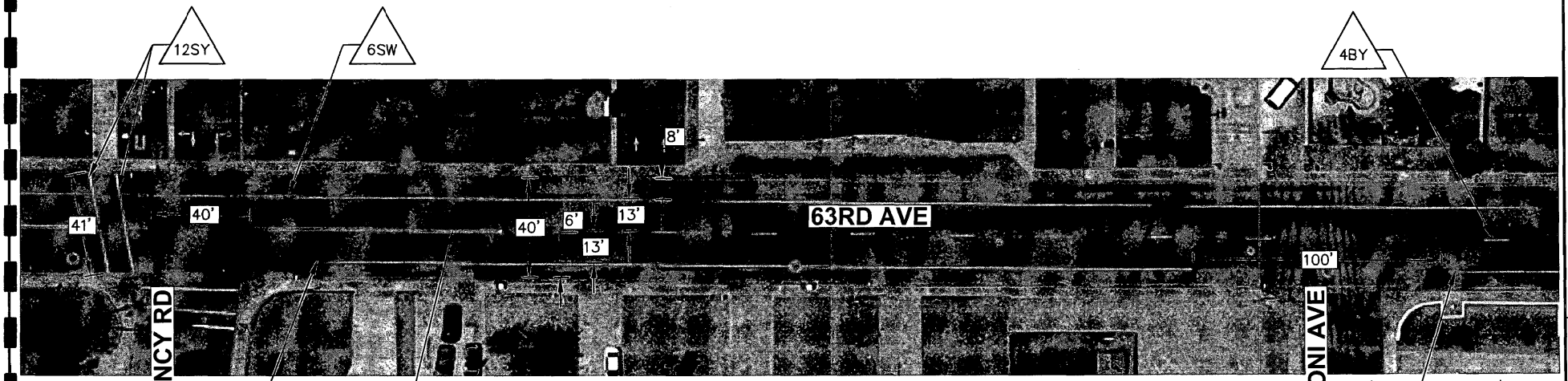
2014/2015 PAVEMENT MANAGEMENT PROGRAM
63RD AVE
GREENWAY RD - NANCY RD

DRAWING
ST-24
MAP
Exhibit 18
DRAWN AS/CG/SK
CHECKED RS/TB
DATE
MAR 2015
SHEET
26 OF 50

P:\Projects\2014\214089 - City of Glendale FY 2014 - 2015 Pavement Pres\CAD Files\Sheets\Surface Treatment 2\36-13\26 ST2-36-13 01.dwg 3/24/2015 7:51:01 AM RYAN



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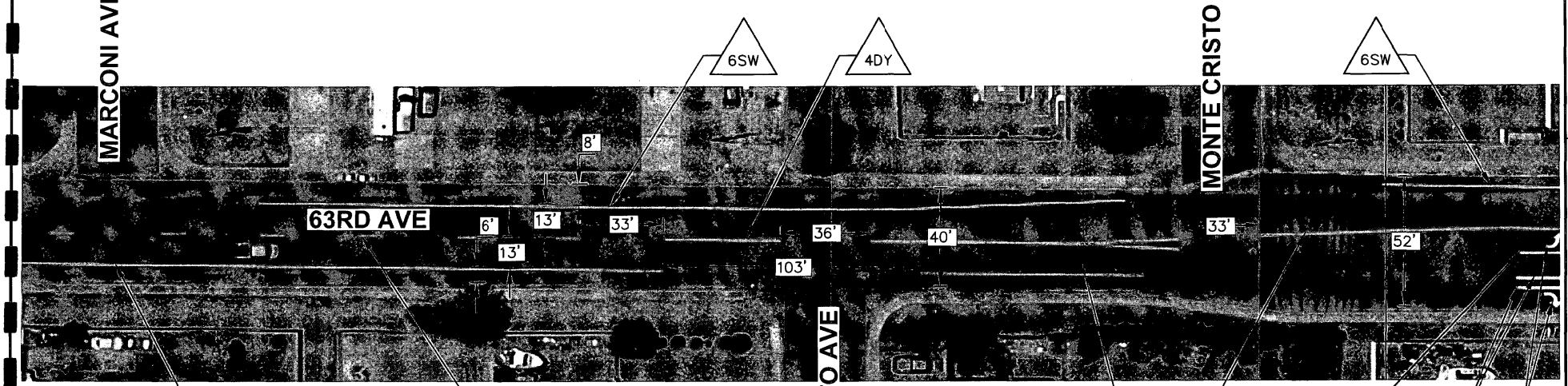

EXHIBIT 17 & 18

NOTE:
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2014/2015 PAVEMENT MANAGEMENT PROGRAM
63RD AVE
NANCY RD - PARADISE LN

DRAWING
ST-25
MAP
EXHIBIT 17/18
DRAWN AS/CG/SK
CHECKED RS/TB
DATE
MAR 2015
SHEET
27 OF 50

P:\Projects\2014\214089 - City of Glendale FY 2014 - 2015 Pavement Pres\CAD Files\Sheets\Surface Treatment 2\36-13\27 ST2-36-13 02.dwg 3/24/2015 7:51:10 AM RYAN

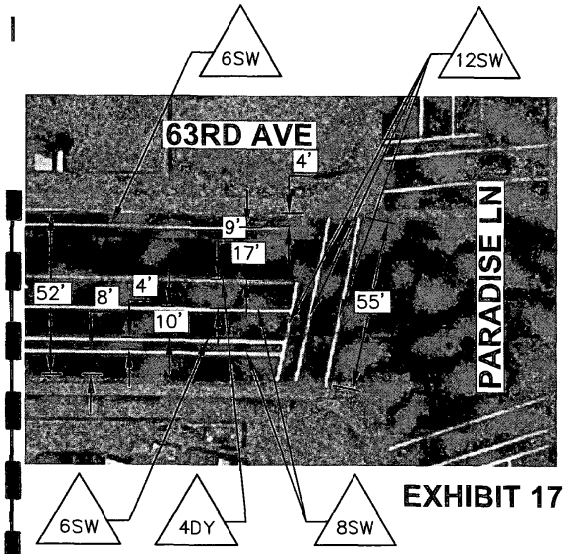
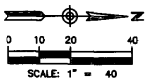


EXHIBIT 17



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63RD AVE
PARADISE LN

DRAWING
ST-26
MAP
Exhibit 17
DRAWN AS/CG/SK
CHECKED RS/TB
DATE
MAR 2015
SHEET
28 OF 50

P:\Projects\2014\214089 - City of Glendale FY 2014 - 2015 Pavement Pres\CAD Files\Sheets\Surface Treatment 2135-13\28 ST2-36-13 03.dwg 3/24/2015 7:51:19 AM RYAN

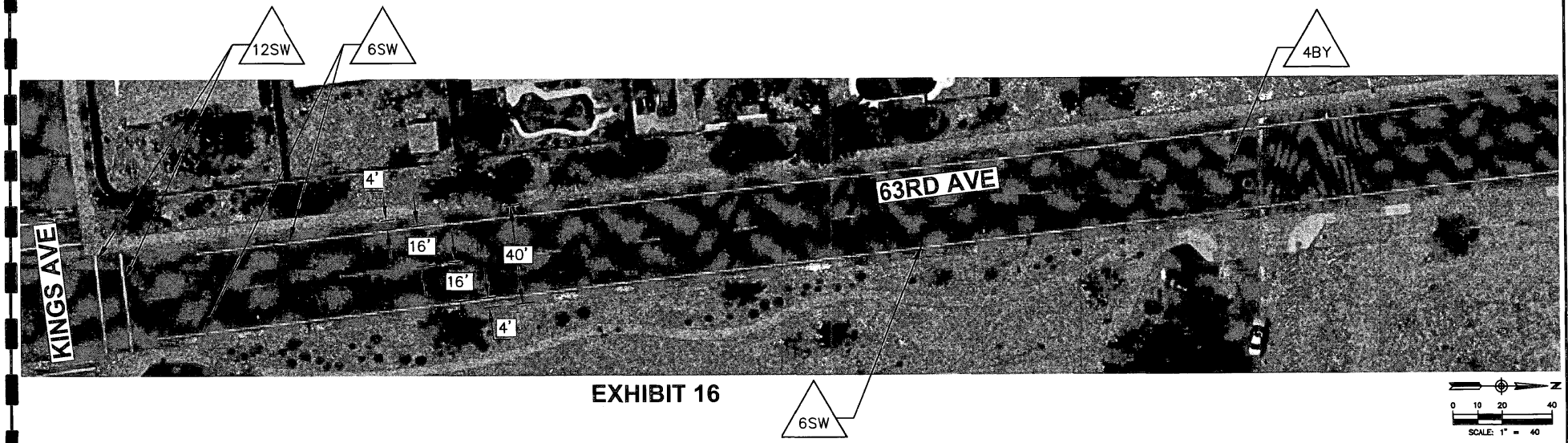

EXHIBIT 16

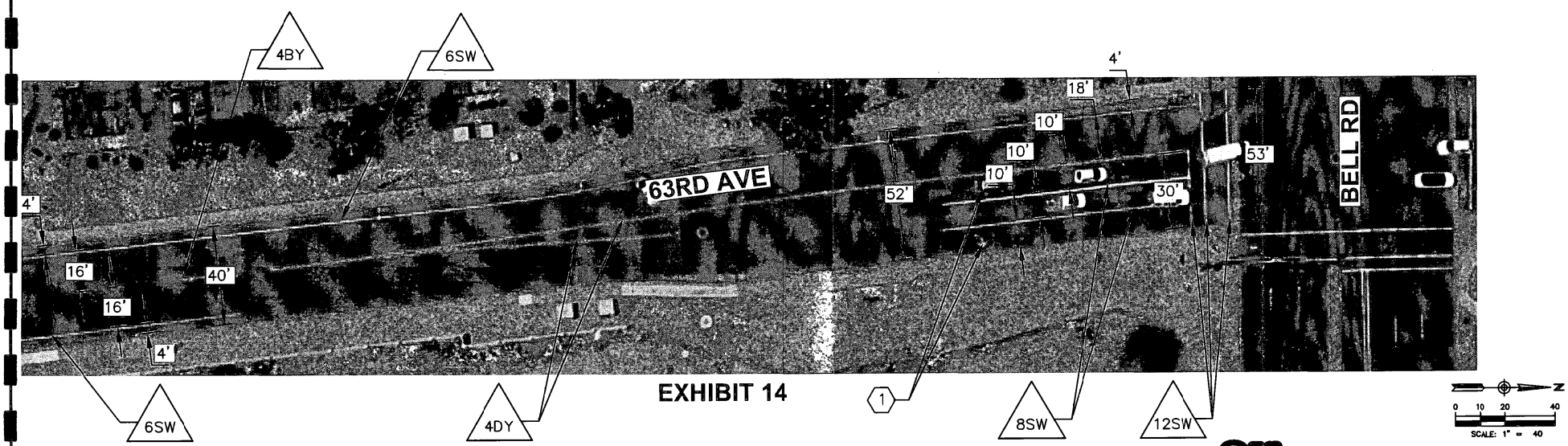

EXHIBIT 14

NOTE:
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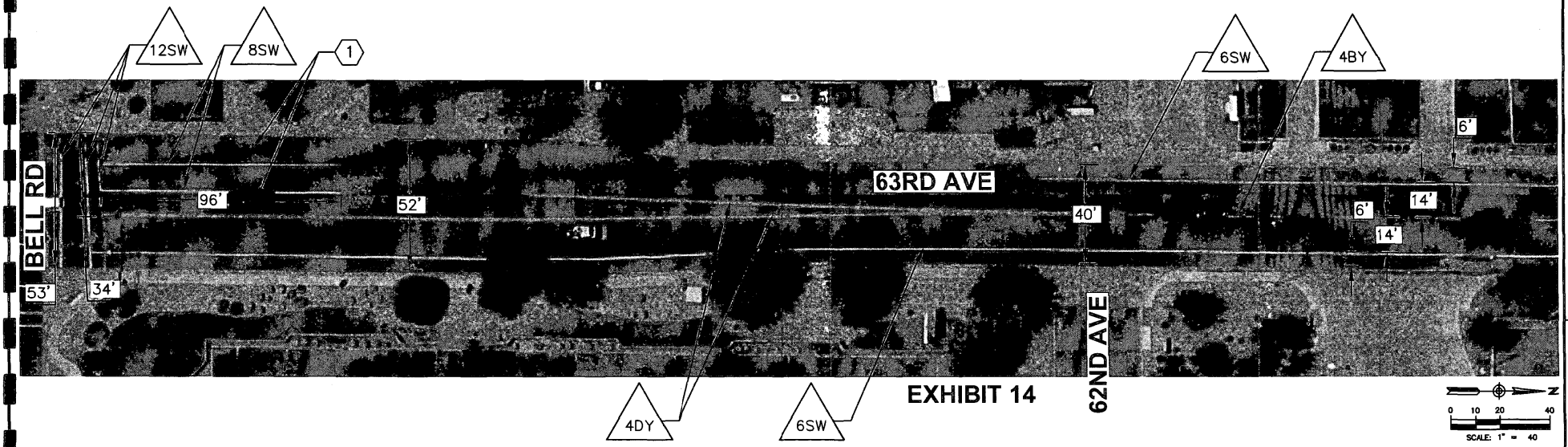
63RD AVE
KINGS AVE - BELL RD

DRAWING ST-27
MAP EXHIBIT 14/16
DRAWN AS/CG/SK
CHECKED RS/TB
DATE MAR 2015
SHEET 29 OF 50

P:\Projects\2014\2014089 - City of Glendale FY 2014 - 2015 Pavement Pres\CAD Files\Sheets\Surface Treatment 2\36 13\29 ST2-36-13 04.dwg 3/24/2015 7:51:30 AM RYAN



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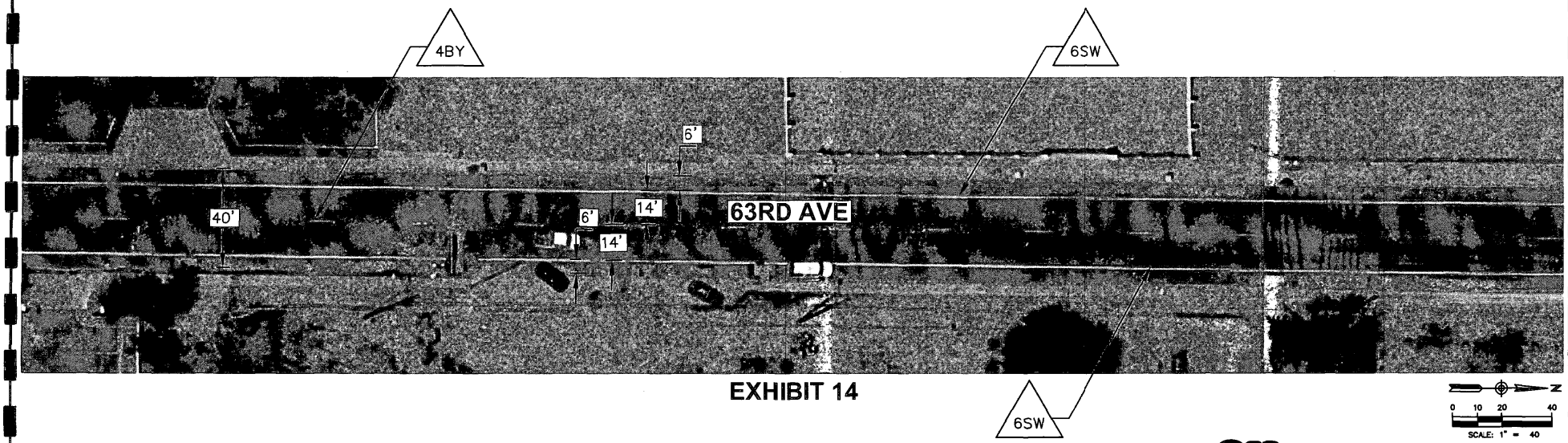

EXHIBIT 14

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

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63RD AVE
BELL RD - GREENBRIAR DR

DRAWING ST-28
MAP Exhibit 14
DRAWN AS/CG/SK
CHECKED RS/TB
DATE MAR 2015
SHEET 30 OF 50

P:\Projects\2014\214089 - City of Glendale FY 2014 - 2015 Pavement Pres\CAD Files\Sheets\Surface Treatment 2038-13\30 ST2-38-13 01.dwg 3/24/2015 7:51:40 AM RYAN

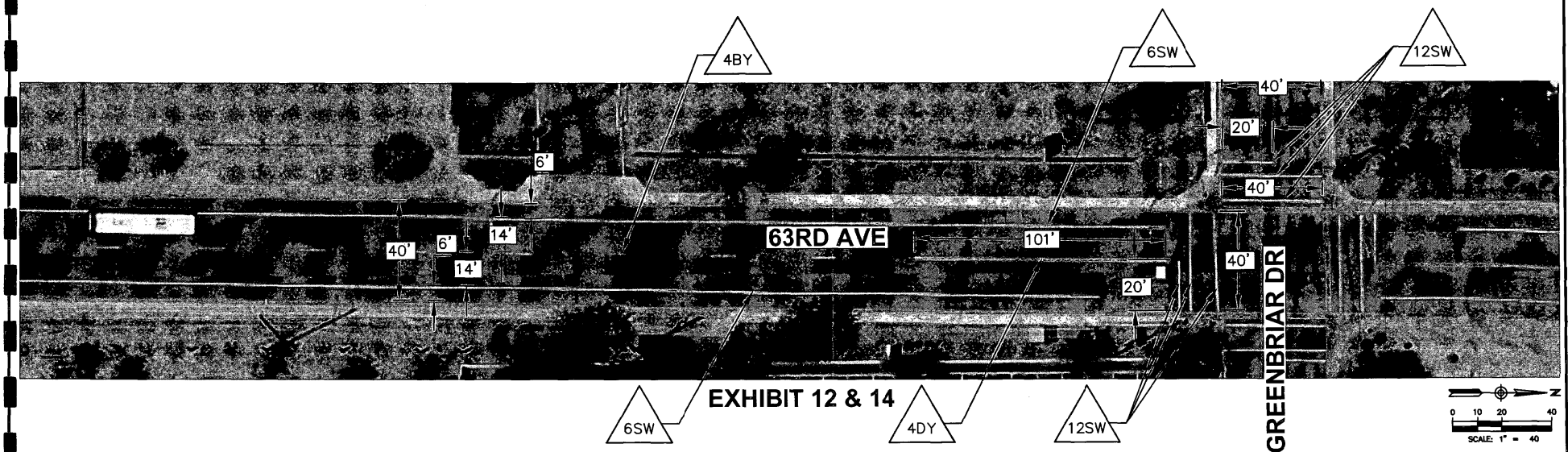

EXHIBIT 12 & 14

NOTE:
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2014/2015 PAVEMENT MANAGEMENT PROGRAM
63RD AVE
BELL RD - GREENBRIAR DR

DRAWING
ST-29
MAP
EXHIBIT 12/14
DRAWN AS/CG/SK
CHECKED RS/TB
DATE MAR 2015
SHEET 31 OF 50

P:\Projects\2014\214089 - City of Glendale FY 2014 - 2015 Pavement Pres\CAD Files\Sheets\Surface Treatment 2\38-1331 ST2-38-13 02.dwg 3/24/2015 7:51:49 AM RYAN

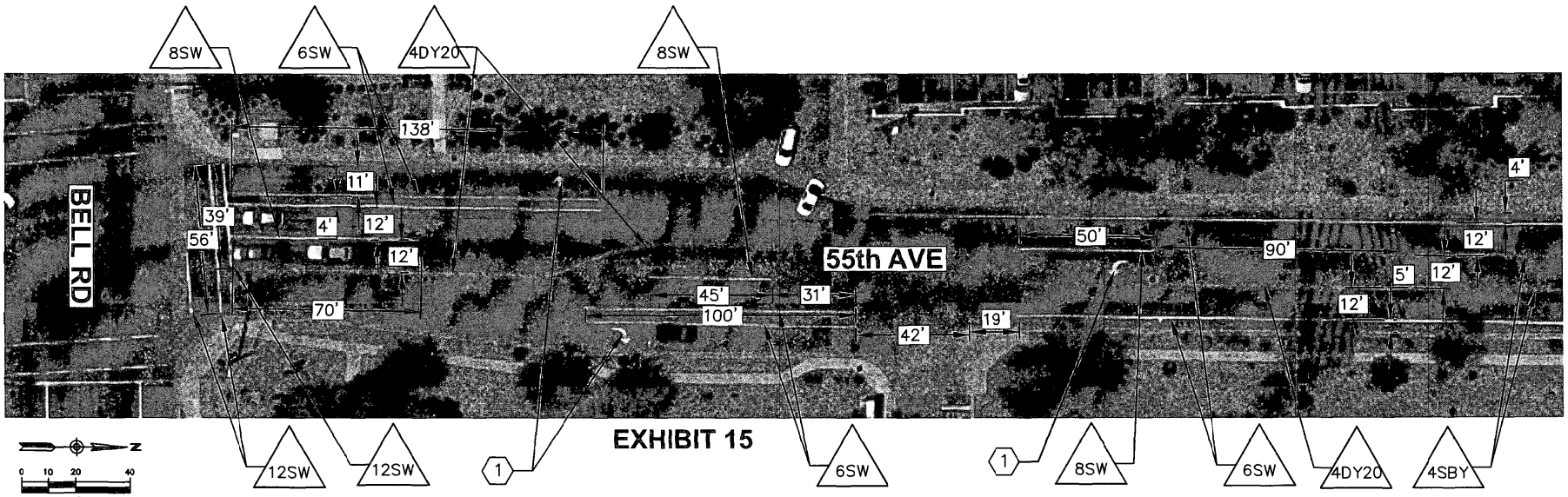

EXHIBIT 15

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

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55TH AVE.
BELL RD. - GROVERS AVE.

DRAWING
ST-30
MAP
Exhibit 15
DRAWN AS/CG/SK
CHECKED RS/TB
DATE MAR 2015
SHEET 32 OF 50

P:\Projects\2014\214089 - City of Glendale FY 2014 - 2015 Pavement Pres\CAD Files\Sheets\Surface Treatment 2\38-15\32 ST2-38-15 01.dwg 3/24/2015 7:52:00 AM RYAN

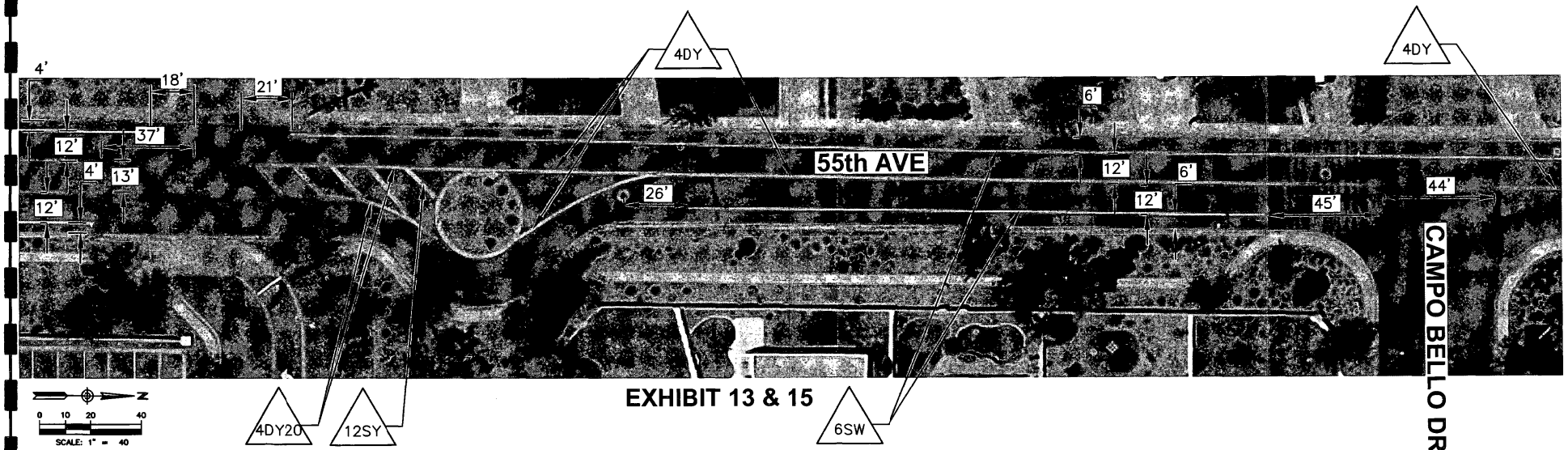

EXHIBIT 13 & 15

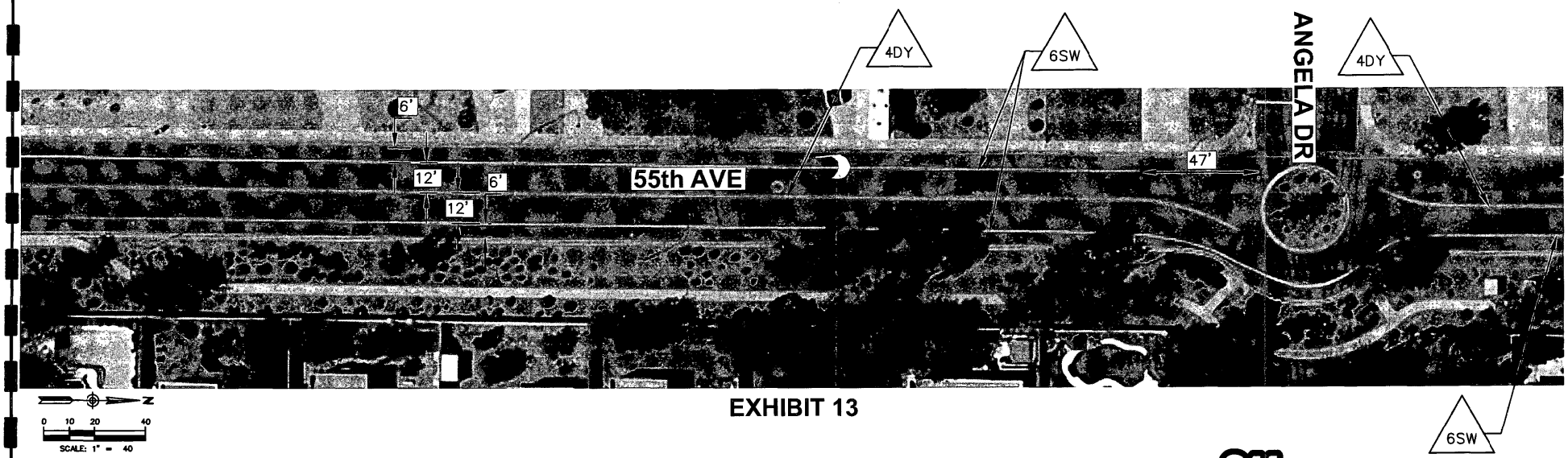

EXHIBIT 13

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

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2014/2015 PAVEMENT MANAGEMENT PROGRAM
55TH AVE.
BELL RD. - GROVERS AVE.

DRAWING
ST-31
MAP
Exhibit 13 & 15
DRAWN AS/CG/SK
CHECKED RS/TB
DATE MAR 2015
SHEET 33 OF 50

P:\Projects\2014\214089 - City of Glendale FY 2014 - 2015 Pavement Prest\CAD Files\Sheets\Surface Treatment 2\38-15\33 ST2-38-15 02.dwg 3/24/2015 7:52:10 AM RYAN

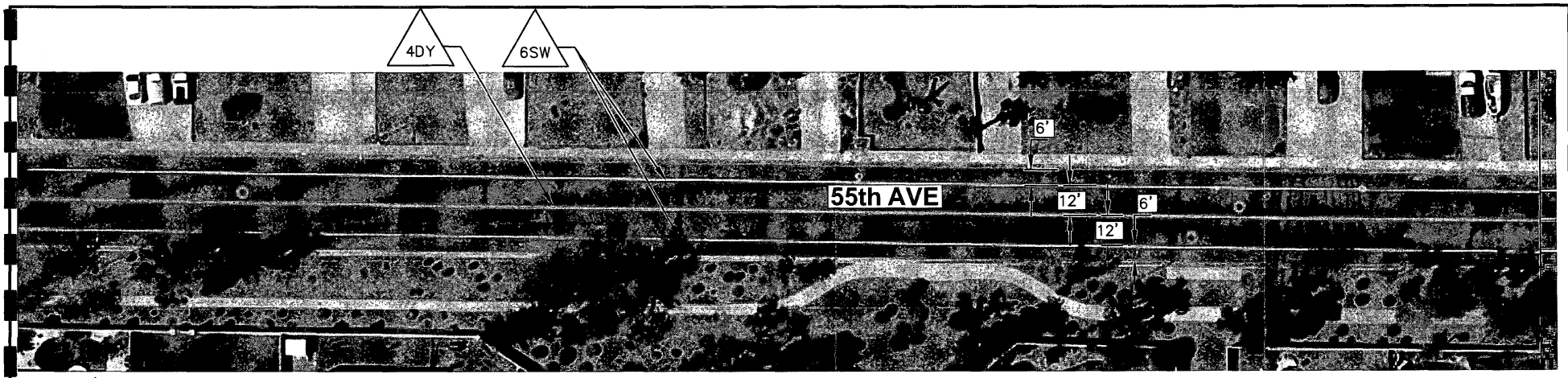

EXHIBIT 13

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SCALE: 1" = 40

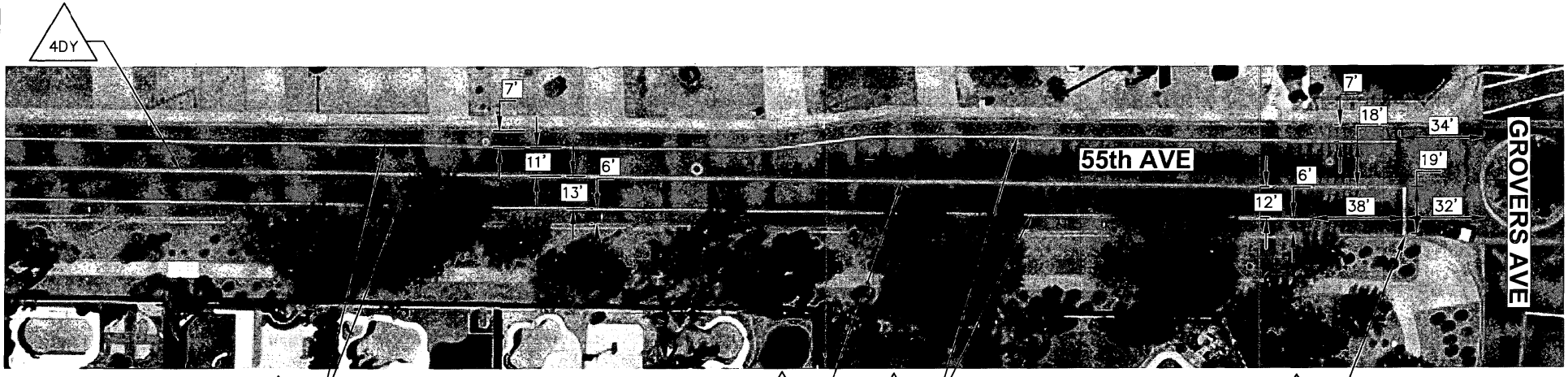

EXHIBIT 13

0 10 20 40
SCALE: 1" = 40

NOTE:
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2014/2015 PAVEMENT MANAGEMENT PROGRAM
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BELL RD. - GROVERS AVE.

DRAWING
ST-32
MAP
Exhibit 13
DRAWN AS/CG/SK
CHECKED RS/TB
DATE MAR 2015
SHEET 34 OF 50

P:\Projects\2014\214089 - City of Glendale FY 2014 - 2015 Pavement Pres\CAD Files\Sheets\Surface Treatment 2\38-15\34 ST2-38-15 03.dwg 3/24/2015 7:52:20 AM RYAN

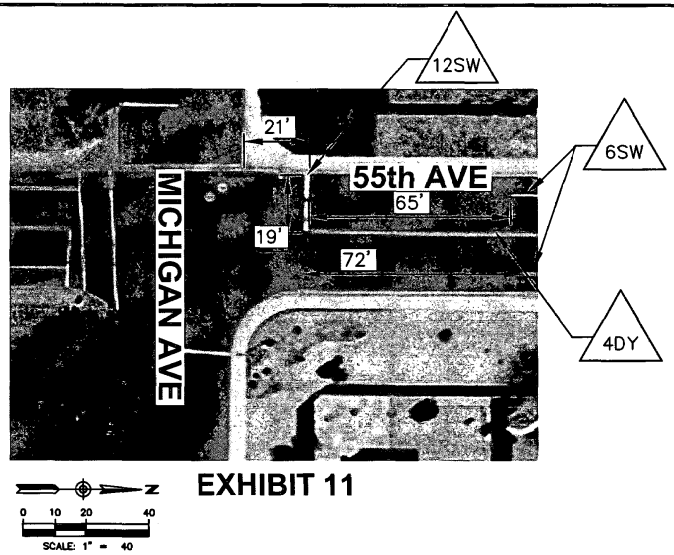

EXHIBIT 11

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

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MICHIGAN AVE. - UNION HILLS DR.

DRAWING
ST-33
MAP
Exhibit 11
DRAWN AS/CG/SK
CHECKED RS/TB
DATE MAR 2015
SHEET 35 OF 50

P:\Projects\2014\214089 - City of Glendale FY 2014 - 2015 Pavement Pres\CAD Files\Sheets\Surface Treatment 2\38-15\35 ST2-38-15 04.dwg 3/24/2015 7:52:29 AM RYAN

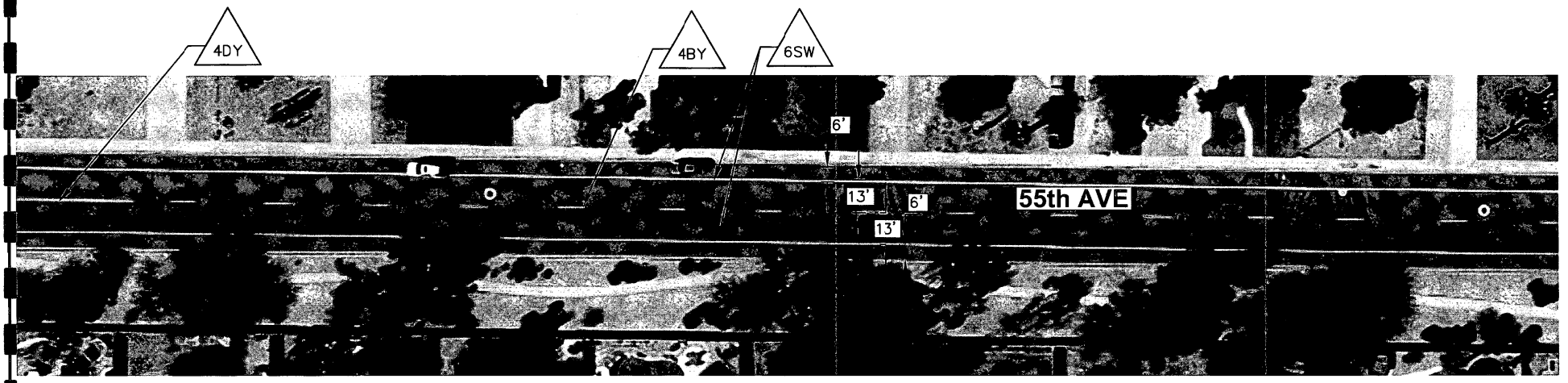

EXHIBIT 11

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SCALE: 1" = 40

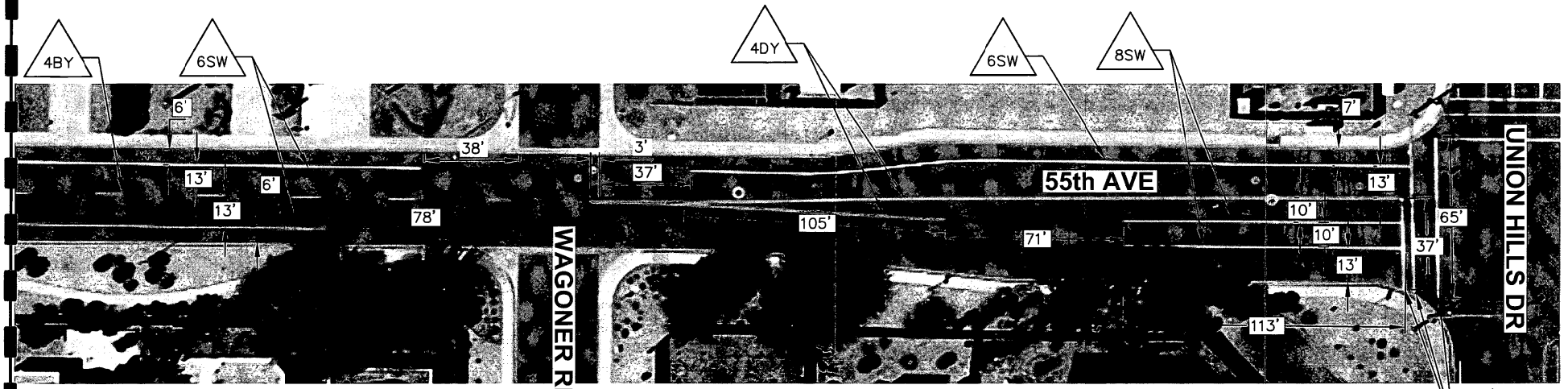

EXHIBIT 10 & 11

0 10 20 40
SCALE: 1" = 40

NOTE:
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2014/2015 PAVEMENT MANAGEMENT PROGRAM
55TH AVE.
MICHIGAN AVE. - UNION HILLS DR.

DRAWING
ST-34

MAP
Exhibit 10 & 11

DRAWN	CHECKED
AS/CG/SK	RS/TB

DATE
MAR 2015

SHEET
36 OF 50

P:\Projects\2014\2014089 - City of Glendale FY 2014 - 2015 Pavement Pres\CAD Files\Sheets\Surface Treatment 2\38-15\36 ST2-38-15 05.dwg 3/24/2015 7:52:40 AM RYAN

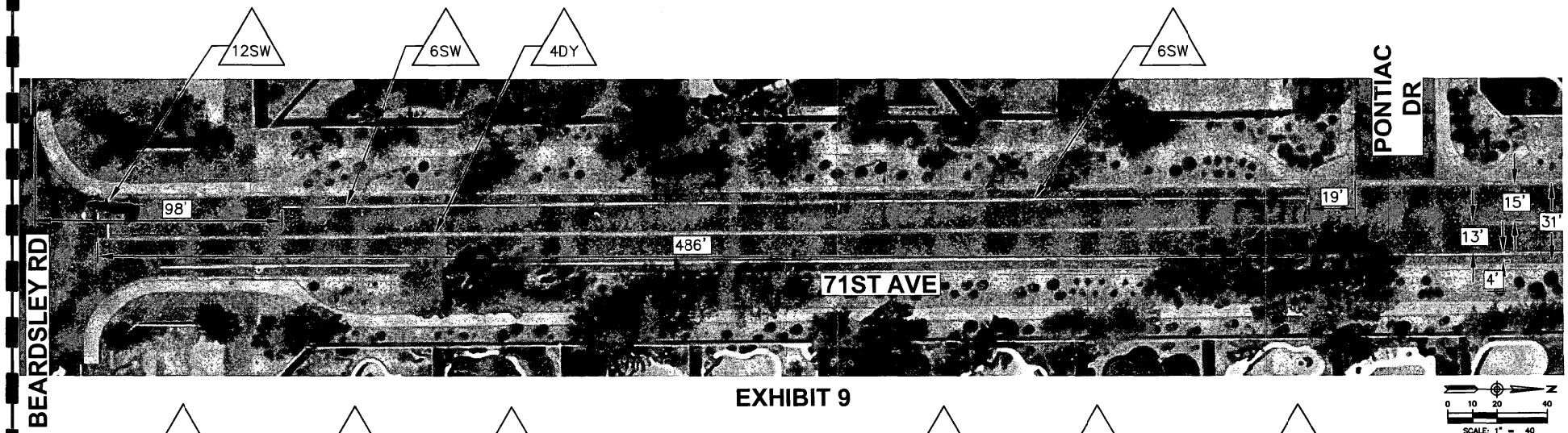

EXHIBIT 9

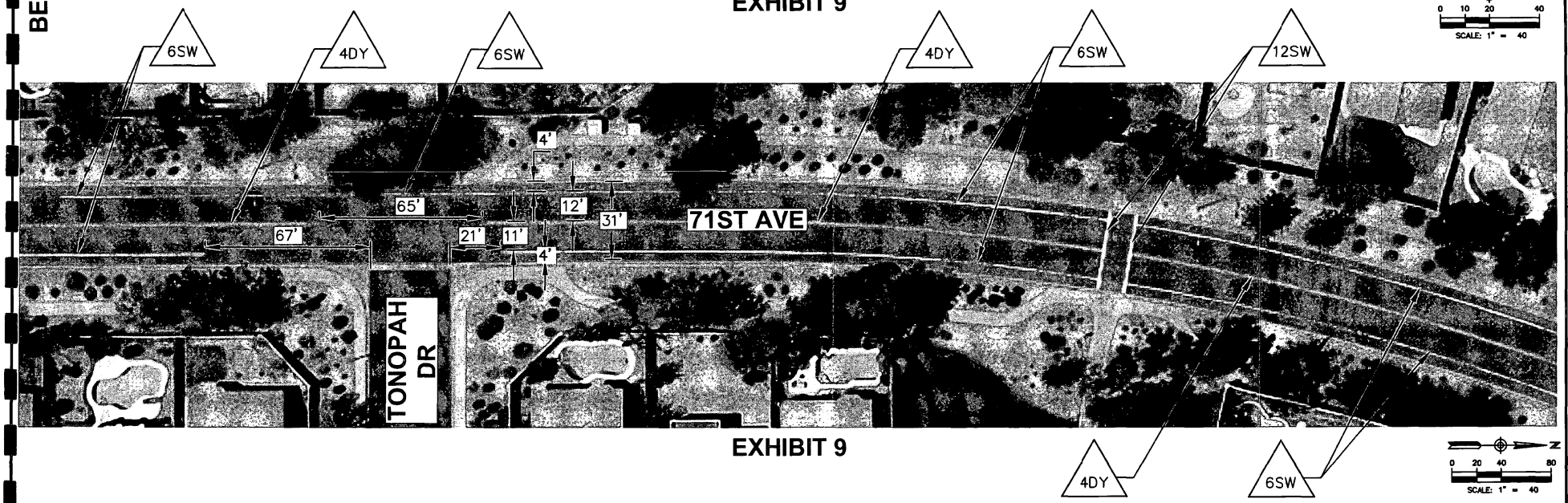

EXHIBIT 9

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

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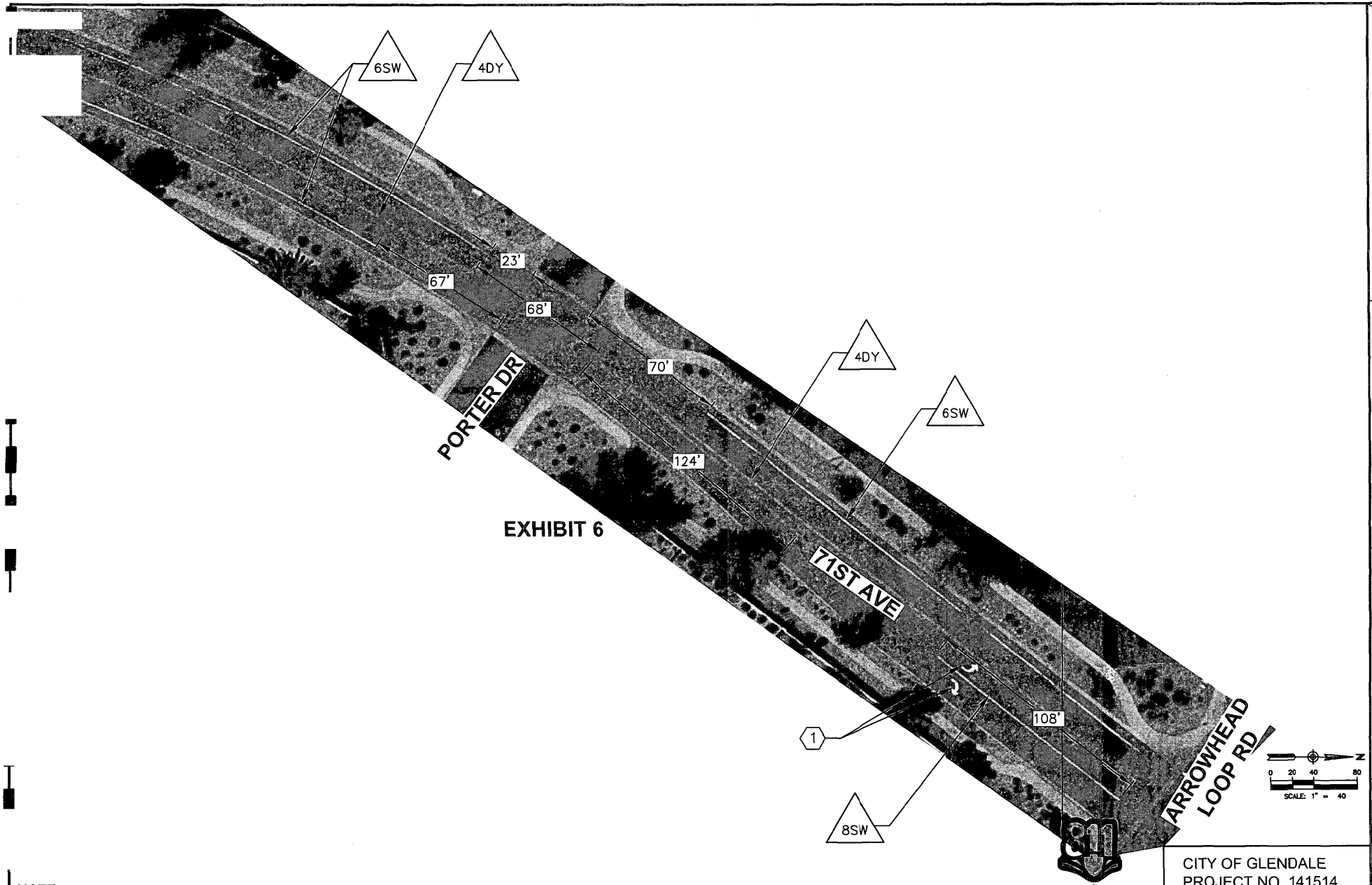
71ST AVE.
BEARDSLEY RD. - ARROWHEAD LOOP RD.

DRAWING ST-35
MAP Exhibit 9
DRAWN AS/CG/SK
CHECKED RS/TB
DATE MAR 2015
SHEET 37 OF 50

P:\Projects\2014\2140069 - City of Glendale FY 2014 - 2015 Pavement Pres\CAD Files\Sheets\Surface Treatment 2142-11\37 ST2-42-11 01.dwg 3/24/2015 7:52:51 AM RYAN



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2014/2015 PAVEMENT MANAGEMENT PROGRAM
71ST AVE.
BEARDSLEY RD. - ARROWHEAD LOOP RD.

DRAWING ST-36
MAP Exhibit 6
DRAWN AS/CG/SK
CHECKED RS/TB
DATE MAR 2015
SHEET 38 OF 50

P:\Projects\2014\214089 - City of Glendale FY 2014 - 2015 Pavement Pres\CAD Files\Sheets\Surface Treatment 2\42-11\38 ST2-42-11 02.dwg 3/24/2015 7:53:00 AM RYAN

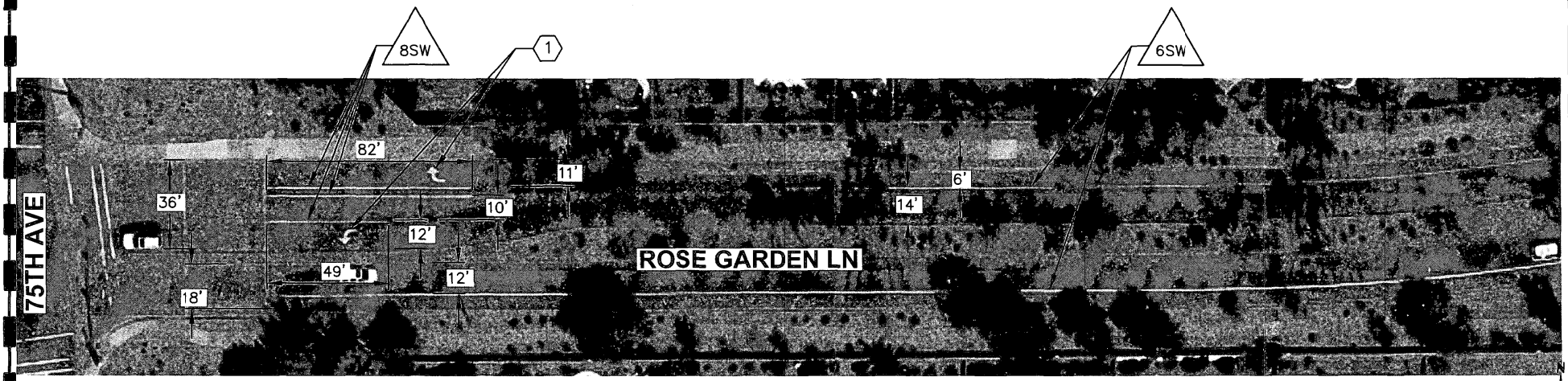

EXHIBIT 5

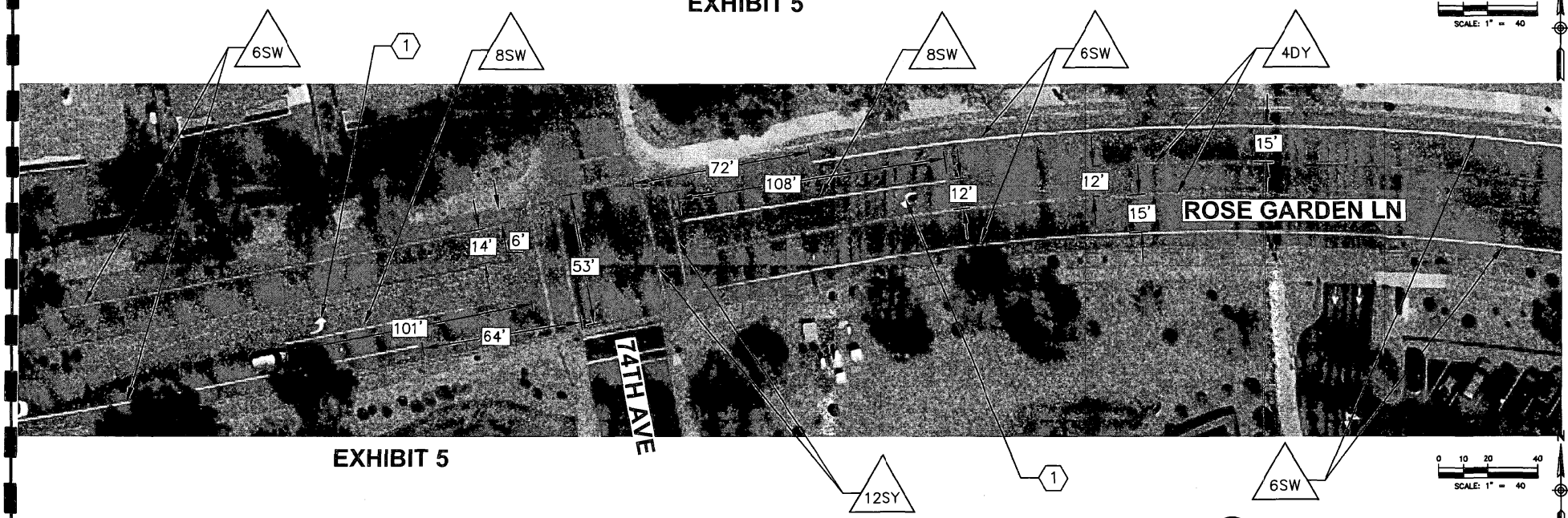

EXHIBIT 5

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2014/2015 PAVEMENT MANAGEMENT PROGRAM
ROSE GARDEN LN
75TH AVE. - 71ST AVE.

DRAWING
ST-37

MAP
Exhibit 5

DRAWN AS/CG/SK
CHECKED RS/TB
DATE MAR 2015
SHEET 39 OF 50

P:\Projects\2014\214089 - City of Glendale FY 2014 - 2015 Pavement Pres\CAD Files\Sheets\Surface Treatment 242-11\39 ST2-42-11 03.dwg 3/24/2015 7:53:10 AM RYAN

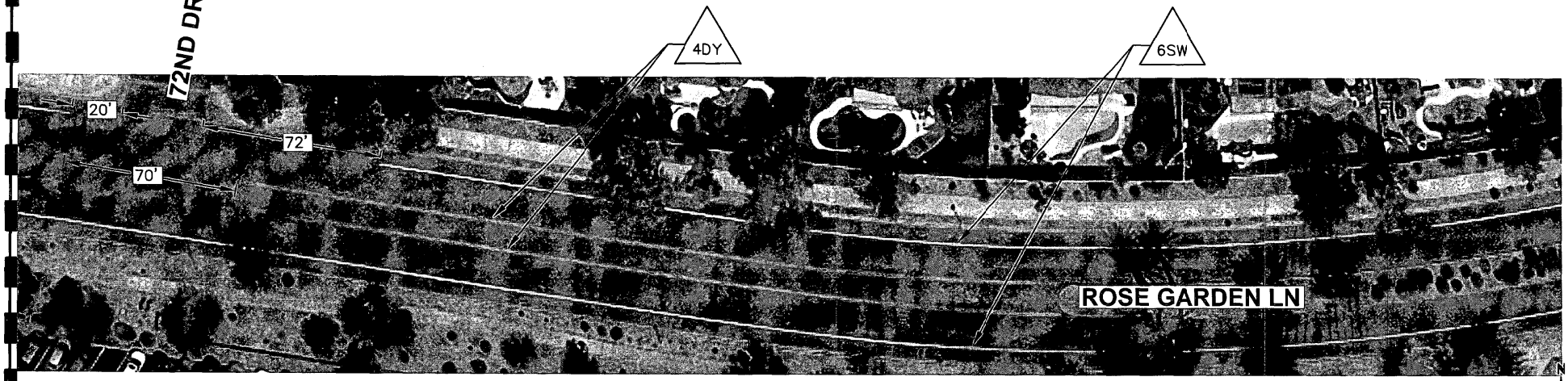

EXHIBIT 5 & 6

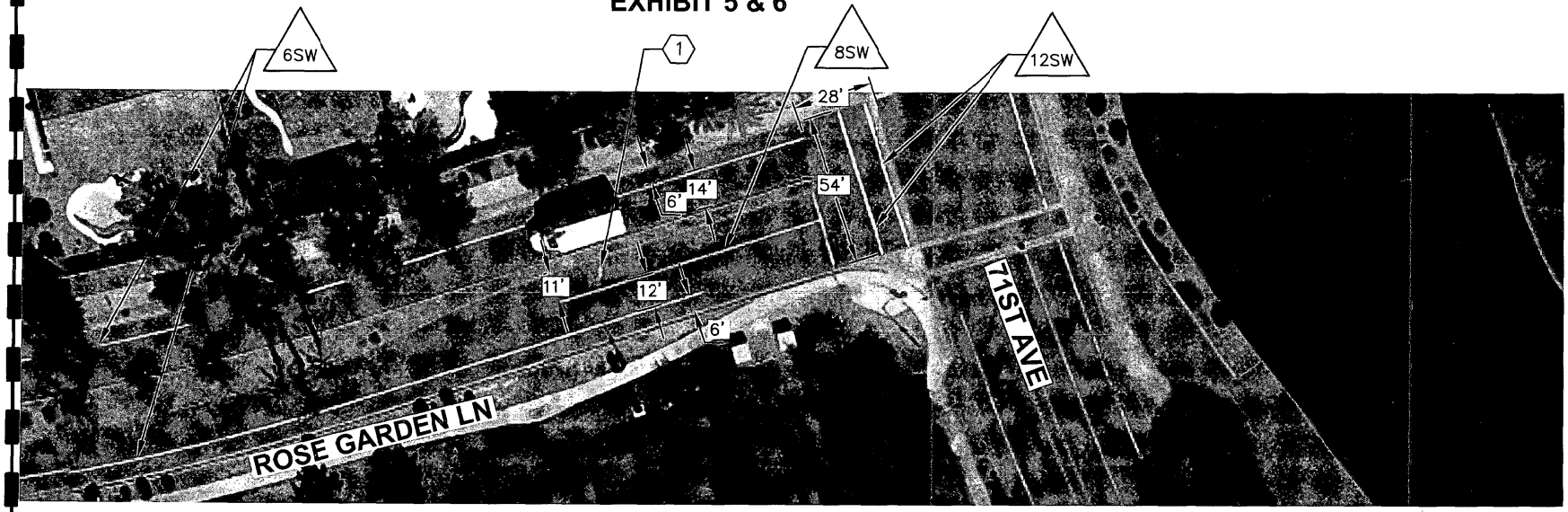

EXHIBIT 6

0 10 20 40
SCALE: 1" = 40

0 10 20 40
SCALE: 1" = 40

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

811
Know what's below.
Call before you dig.

CITY OF GLENDALE
PROJECT NO. 141514
SLURRY SEAL PHASE 2

CITY OF GLENDALE
ENGINEERING DEPARTMENT
5850 W. GLENDALE AVE.
GLENDALE, ARIZONA 85301 (623) 930-3630

RPA
RITOCH-POWELL & Associates
602.263.1177
www.ritochpowell.com

2014/2015 PAVEMENT MANAGEMENT PROGRAM
ROSE GARDEN LN
75TH AVE. - 71ST AVE.

DRAWING
ST-38
MAP
Exhibit 5 & 6
DRAWN AS/CG/SK
CHECKED RS/TB
DATE
MAR 2015
SHEET
40 OF 50

P:\Projects\2014\2140089 - City of Glendale FY 2014 - 2015 Pavement Pres\CAD Files\Sheets\Surface Treatment 2142-11\40 S12-42-11 04.dwg 3/24/2015 7:53:20 AM RYAN

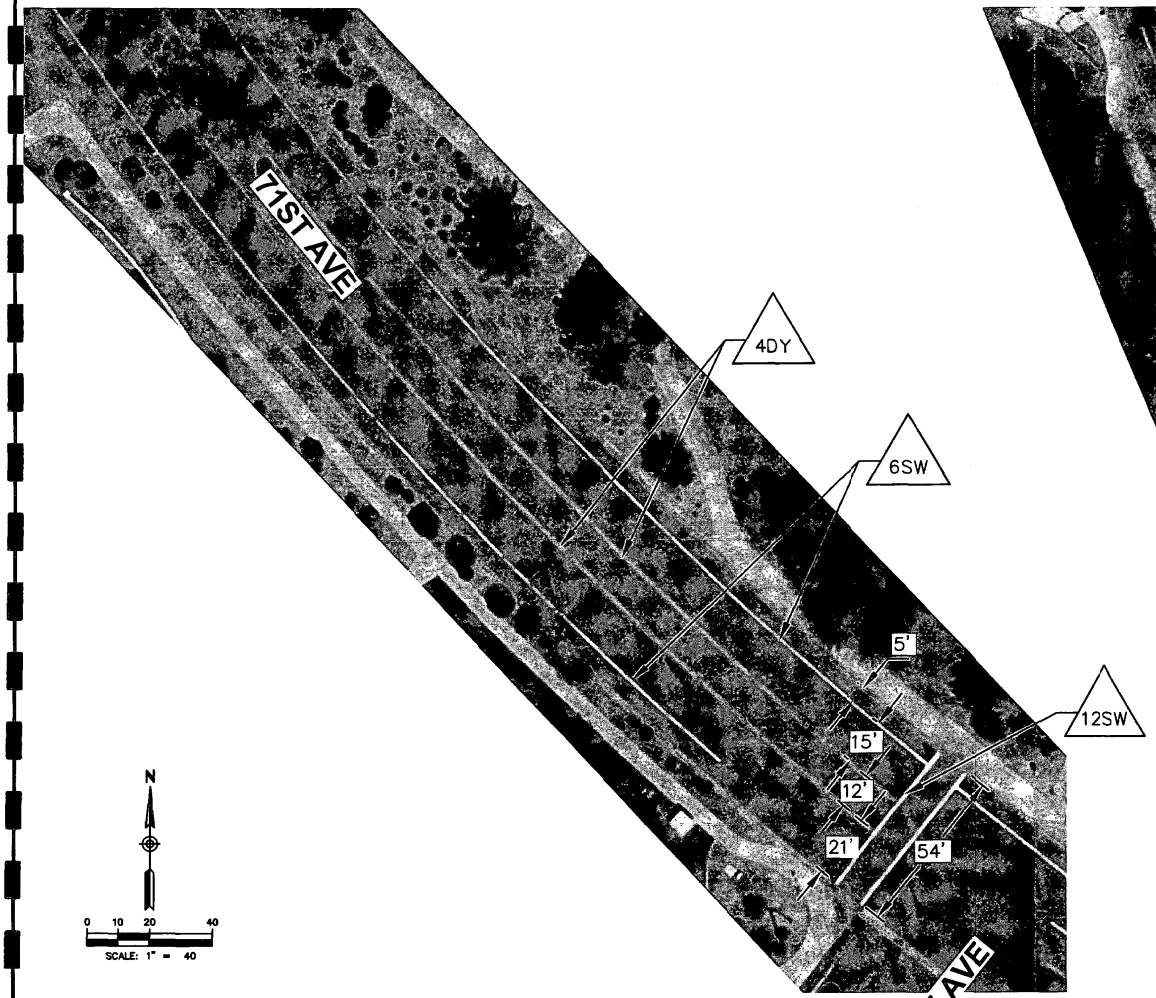

EXHIBIT 6

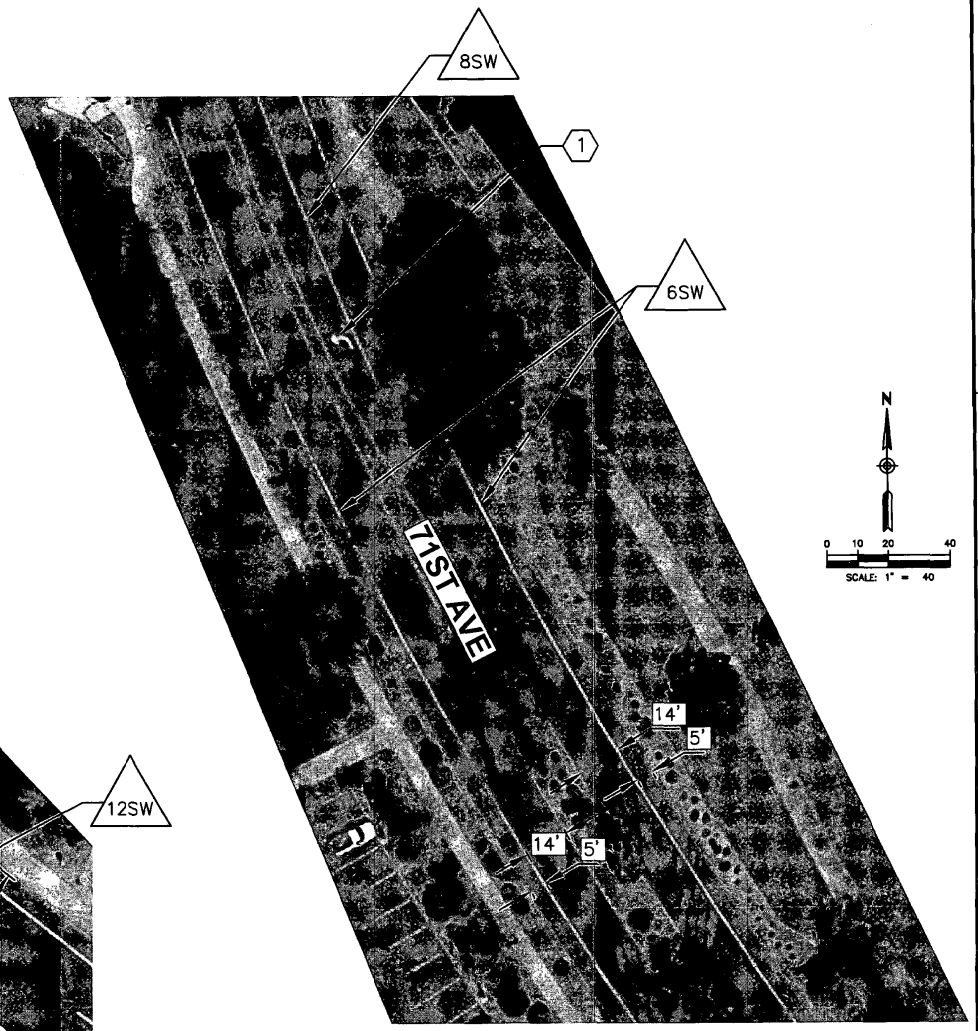

EXHIBIT 6

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

811
Know what's below.
Call before you dig.

CITY OF GLENDALE
PROJECT NO. 141514
SLURRY SEAL PHASE 2

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2014/2015 PAVEMENT MANAGEMENT PROGRAM
71ST AVE.
71ST AVE. - HILLCREST BLVD.

DRAWING
ST-39
MAP
Exhibit 6
DRAWN AS/CG/SK
CHECKED RS/TB
DATE MAR 2015
SHEET 41 OF 50

P:\Projects\2014\214089 - City of Glendale FY 2014 - 2015 Pavement Pres\CAD Files\Sheets\Surface Treatment 2\42-11\41 ST2-42-11 05.dwg 3/24/2015 7:53:30 AM RYAN

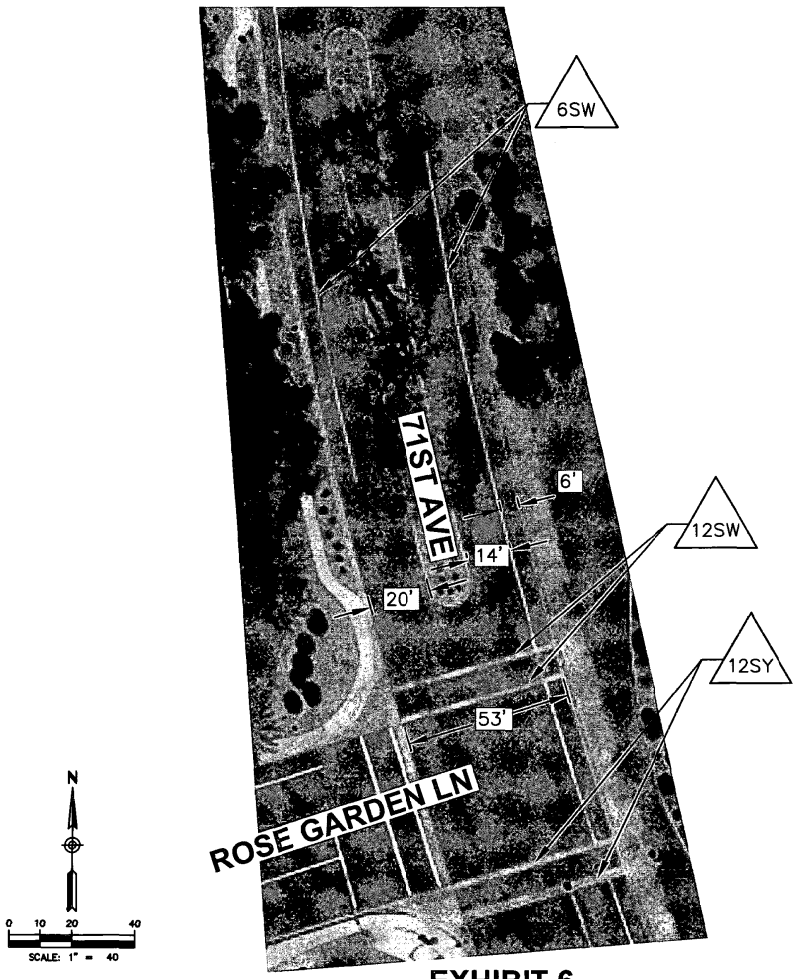

EXHIBIT 6

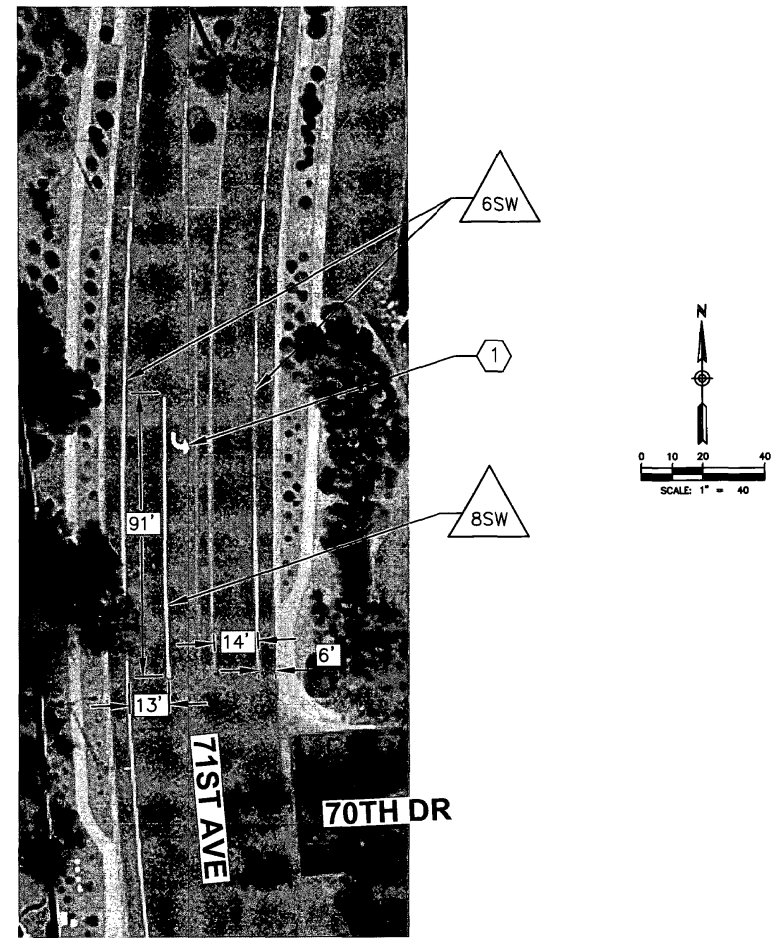

EXHIBIT 6

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

811 Know what's below. Call before you dig.

CITY OF GLENDALE
PROJECT NO. 141514
SLURRY SEAL PHASE 2

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2014/2015 PAVEMENT MANAGEMENT PROGRAM
71ST AVE.
71ST AVE. - HILLCREST BLVD.

DRAWING ST-40
MAP Exhibit 6
DRAWN AS/CG/SK
CHECKED RS/TB
DATE MAR 2015
SHEET 42 OF 50

P:\Projects\2014\214089 - City of Glendale FY 2014 - 2015 Pavement Pres\CAD Files\Sheets\Surface Treatment 2\42-11\42 ST2-42-11 07.dwg 3/24/2015 7:53:40 AM RYAN

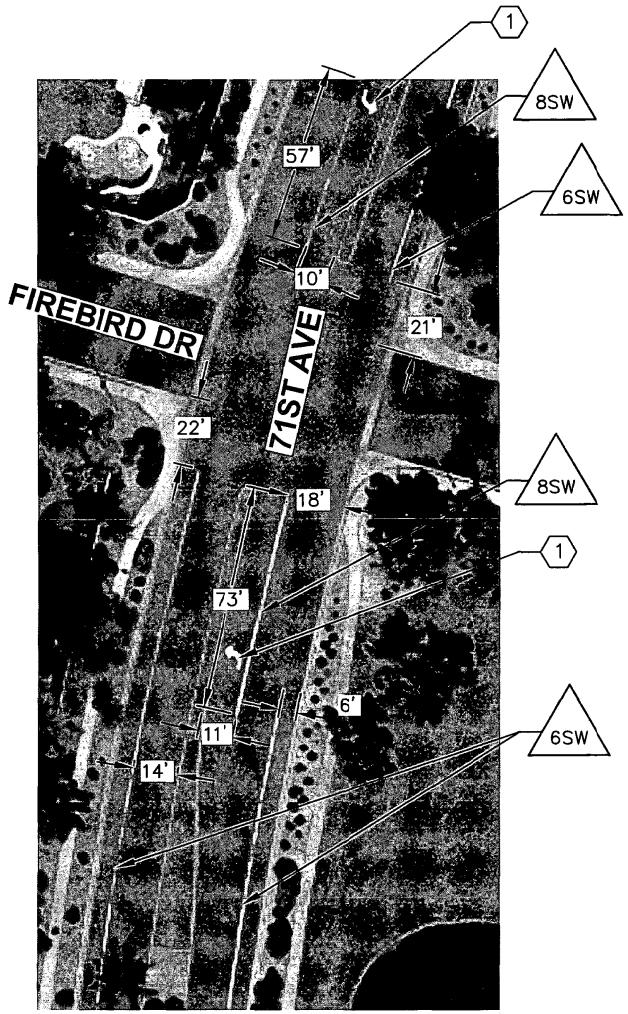

EXHIBIT 6

EXHIBIT 6

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

Know what's **below.** **Call** before you dig.

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SLURRY SEAL PHASE 2

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2014/2015 PAVEMENT MANAGEMENT PROGRAM
71ST AVE.
71ST AVE. - HILLCREST BLVD.

DRAWING ST-41
MAP Exhibit 6
DRAWN AS/CG/SK | CHECKED RS/TB
DATE MAR 2015
SHEET 43 OF 50

P:\Projects\2014\2-14080 - City of Glendale FY 2014 - 2015 Pavement Plans\CAD Files\Sheets\Surface Treatment 242-11143, ST-42-11 08.dwg 3/24/2015 7:43:50 AM RYAN

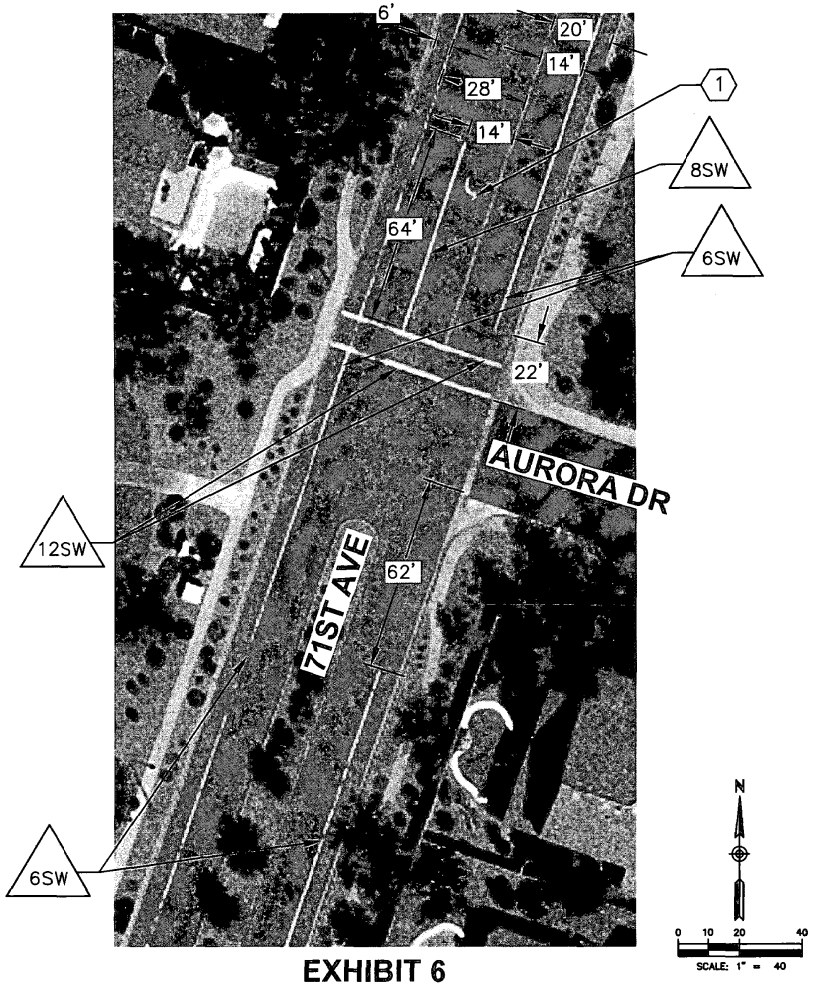

EXHIBIT 6

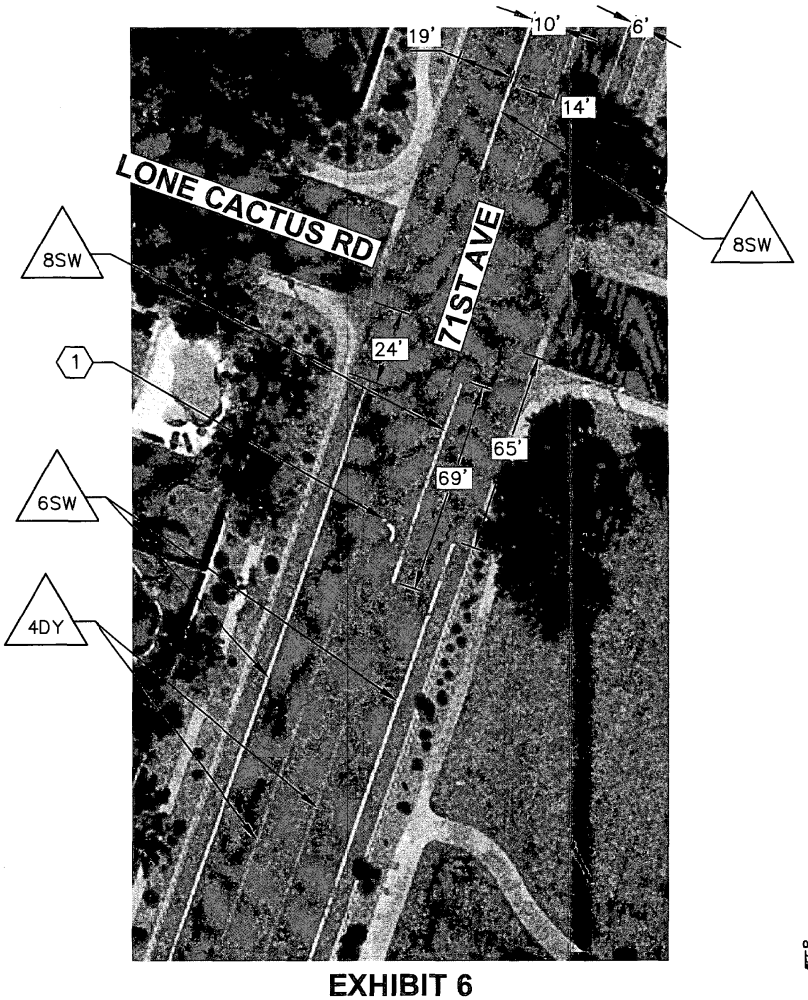

EXHIBIT 6

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

811 Know what's **below.** **Call** before you dig.

CITY OF GLENDALE
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2014/2015 PAVEMENT MANAGEMENT PROGRAM
71ST AVE.
71ST AVE. - HILLCREST BLVD.

DRAWING ST-42
MAP Exhibit 6
DRAWN AS/CG/SK | CHECKED RS/TB
DATE MAR 2015
SHEET 44 OF 50

P:\Projects\2014\214089 - City of Glendale FY 2014 - 2015 Pavement Pres\CAD Files\Sheets\Surface Treatment 242-11144 ST-42-11 09.dwg 3/24/2015 7:54:05 AM RYAN

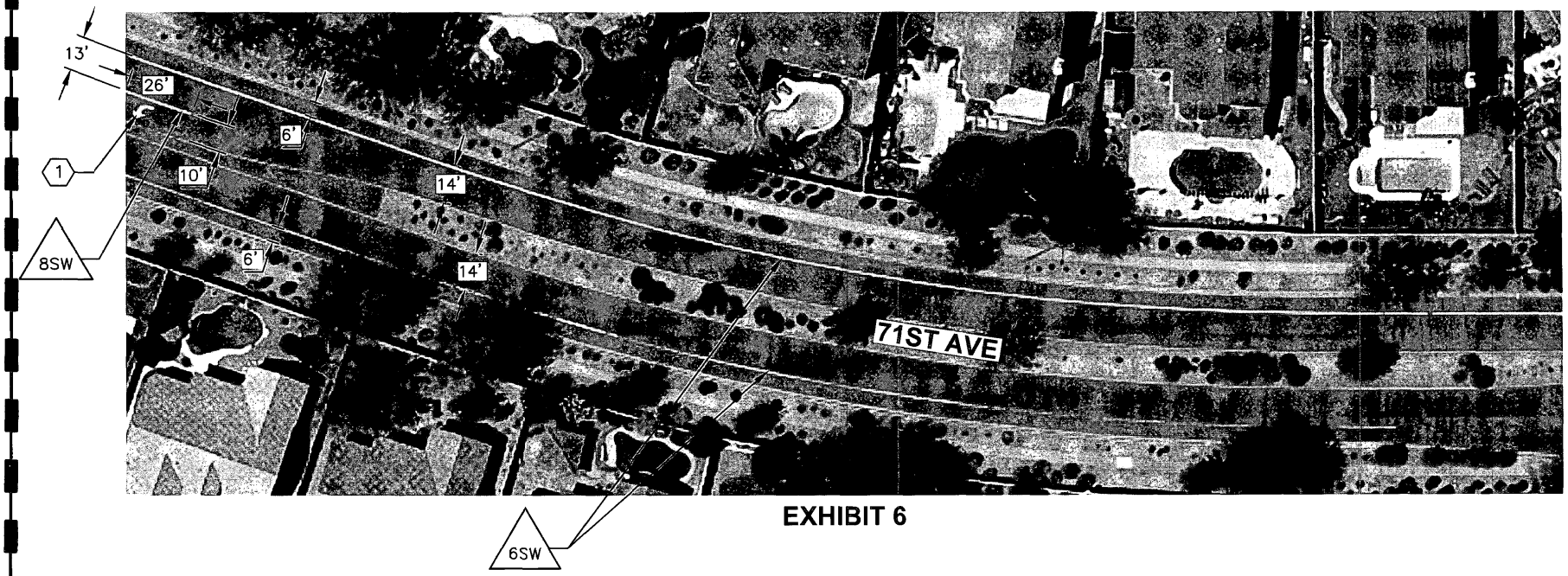

EXHIBIT 6

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

811 Know what's **below.** **Call** before you dig.

0 10 20 40
SCALE: 1" = 40

CITY OF GLENDALE
PROJECT NO. 141514
SLURRY SEAL PHASE 2

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2014/2015 PAVEMENT MANAGEMENT PROGRAM
NORTH 71ST AVENUE
71ST AVE. - HILLCREST BLVD.

DRAWING ST-43
MAP Exhibit 6
DRAWN AS/CG/SK
CHECKED RS/TB
DATE MAR 2015
SHEET 45 OF 50

P:\Projects\2014\214089 - City of Glendale FY 2014 - 2015 Pavement Pres\CAD Files\Sheets\Surface Treatment 2\42-11\45 ST2-42-11 10.dwg 3/24/2015 7:54:10 AM RYAN

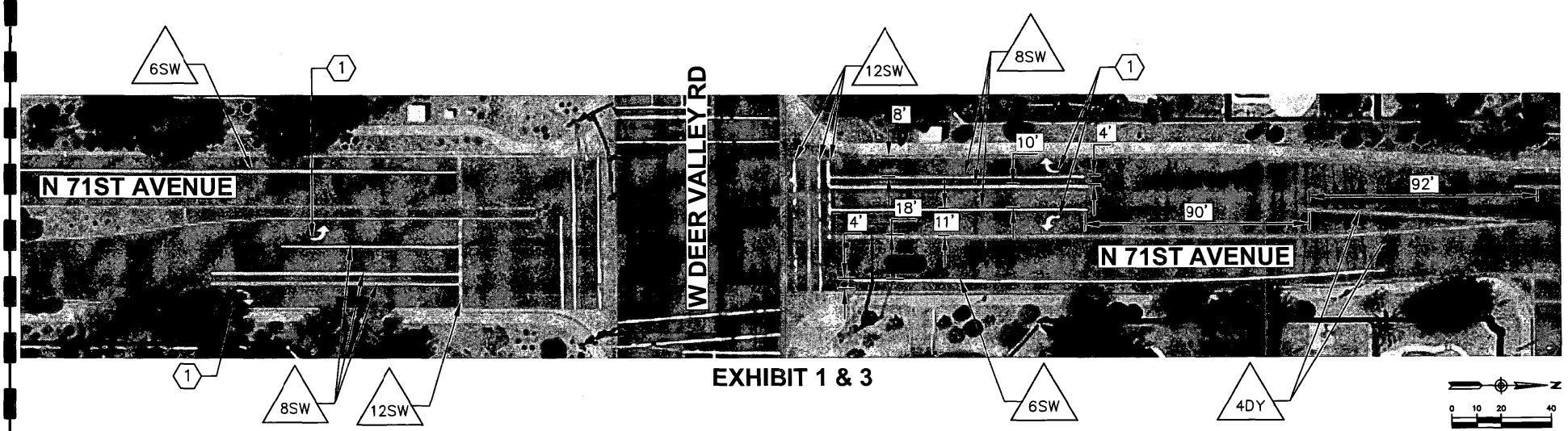

EXHIBIT 1 & 3

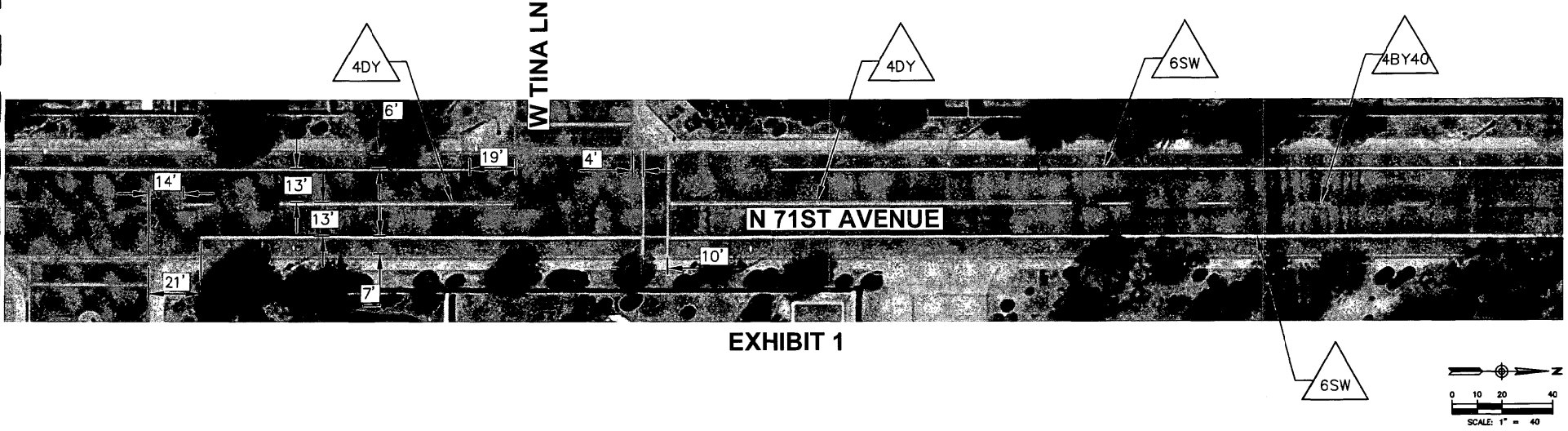

EXHIBIT 1

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

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2014/2015 PAVEMENT MANAGEMENT PROGRAM
NORTH 71ST AVENUE
71ST AVE. - HILLCREST BLVD.

DRAWING
ST-44
MAP
Exhibit 1 & 3
DRAWN AS/CG/SK
CHECKED RS/TB
DATE MAR 2015
SHEET 46 OF 50

P:\Projects\2014\214089 - City of Glendale FY 2014 - 2015 Pavement Pres\CAD Files\Sheets\Surface Treatment 2142-11\46 ST2-42-11 11.dwg 3/24/2015 7:54:20 AM RYAN

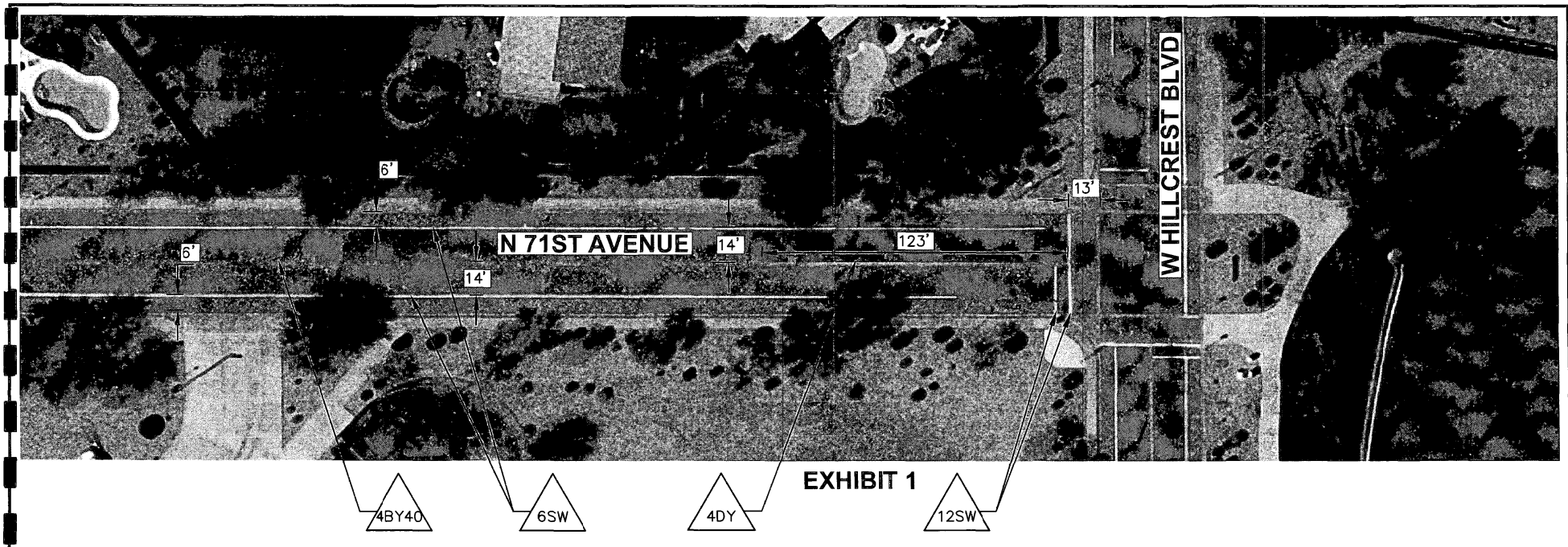

EXHIBIT 1

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

0 10 20 40
SCALE: 1" = 40

811
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PROJECT NO. 141514
SLURRY SEAL PHASE 2

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2014/2015 PAVEMENT MANAGEMENT PROGRAM
71ST AVE.
71ST AVE. - HILLCREST BLVD.

DRAWING
ST-45

MAP
Exhibit 1

DRAWN AS/CG/SK
CHECKED RS/TB
DATE MAR 2015
SHEET 47 OF 50

P:\Projects\2014\214089 - City of Glendale FY 2014 - 2015 Pavement Pres\CAD Files\Sheets\Surface Treatment 2\42-11\47 ST2-42-11 12.dwg 3/24/2015 7:54:30 AM RYAN

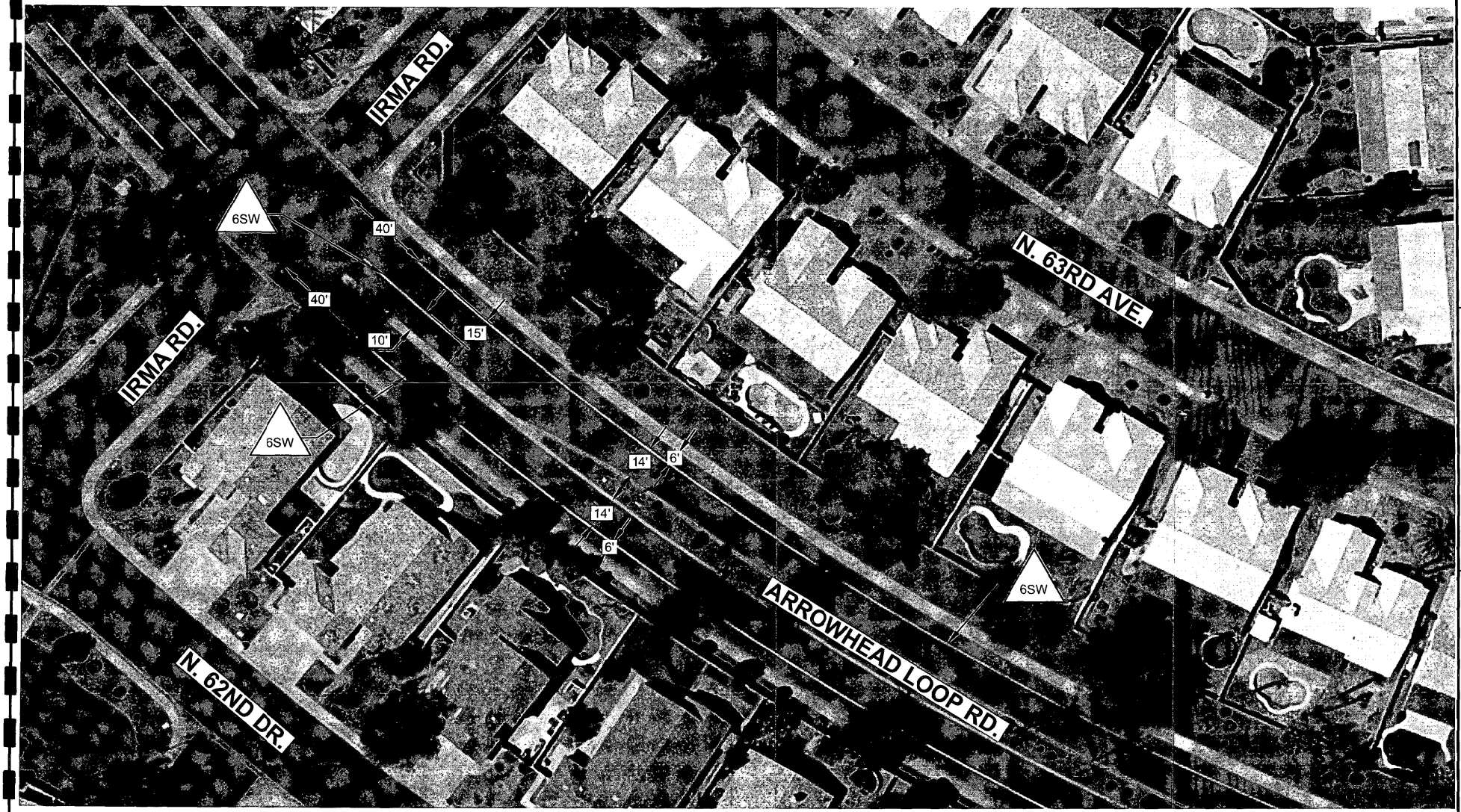

EXHIBIT 7 & 8

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.

811 Know what's **below.** **Call** before you dig.

N

0 10 20 40

SCALE: 1" = 40

CITY OF GLENDALE
PROJECT NO. 141514
SLURRY SEAL PHASE 2

CITY OF GLENDALE
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5850 W. GLENDALE AVE.
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2014/2015 PAVEMENT MANAGEMENT PROGRAM
ARROWHEAD LOOP ROAD
POTTER DR TO IRMA LN

DRAWING ST-46
MAP Exhibit 7 & 8
DRAWN AS/CG/SK | CHECKED RS/TB
DATE MAR 2015
SHEET 48 OF 50

P:\Projects\2014\141089 - City of Glendale FY 2014 - 2015 Pavement Preset\CAD Files\Sheets\Surface Treatment 242-1348 ST-42-13 01.dwg 3/24/2015 7:54:11 AM RYAN

EXHIBIT 8

0 10 20 40
SCALE: 1" = 40

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.

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PROJECT NO. 141514
SLURRY SEAL PHASE 2

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2014/2015 PAVEMENT MANAGEMENT PROGRAM
ARROWHEAD LOOP ROAD
ROSE GARDEN LN TO POTTER DR

DRAWING ST-47
MAP Exhibit 8
DRAWN AS/CG/SK
CHECKED RS/TB
DATE MAR 2015
SHEET 49 OF 50

P:\Projects\2014\214089 - City of Glendale FY 2014 - 2015 Pavement Pres\CAD Files\Sheets\Surface Treatment 242 1349 ST2-42-13 02.dwg 3/24/2015 7:54:50 AM RYAN

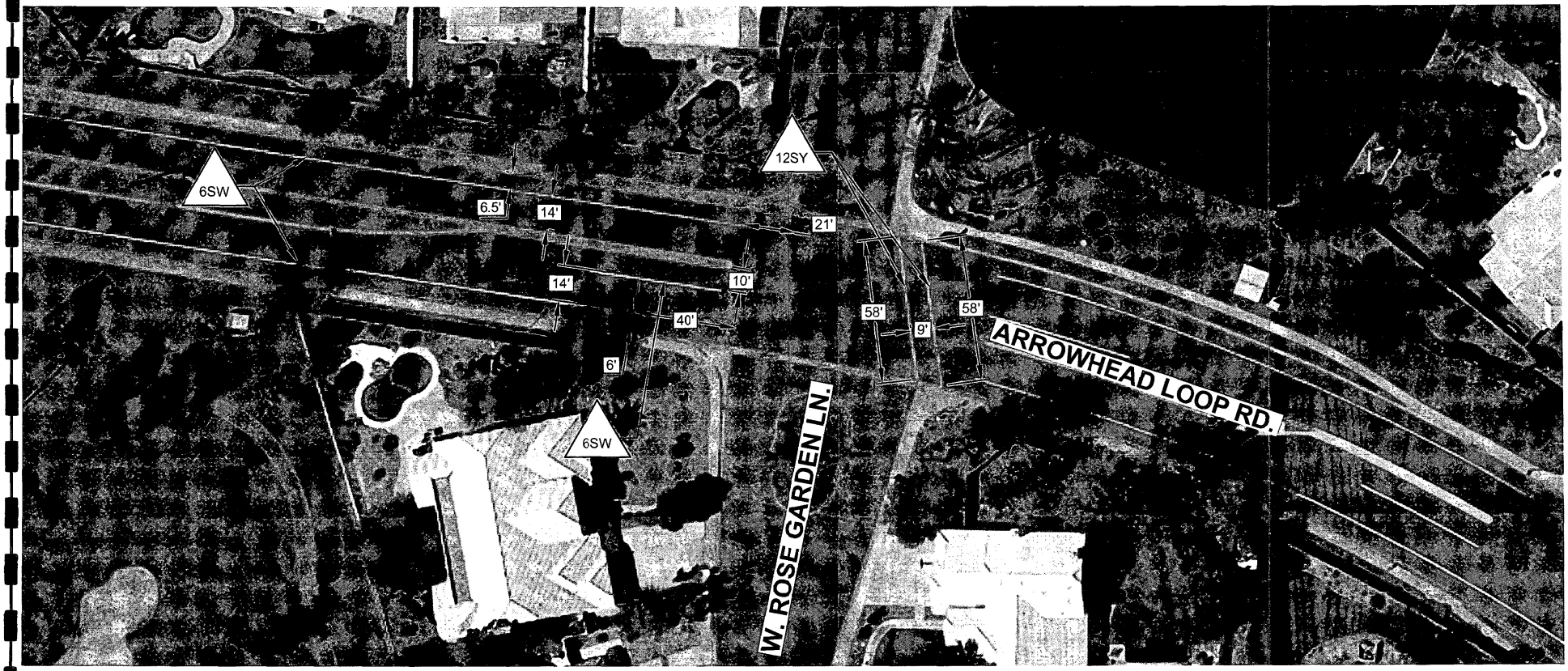

EXHIBIT 8

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.

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0 10 20 40
SCALE: 1" = 40

CITY OF GLENDALE
PROJECT NO. 141514
SLURRY SEAL PHASE 2

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GLENDALE, ARIZONA 85301 (623) 930-3630

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www.ritochpowell.com

2014/2015 PAVEMENT MANAGEMENT PROGRAM
ARROWHEAD LOOP ROAD
ROSE GARDEN LN TO POTTER DR

DRAWING ST-48
MAP Exhibit 8
DRAWN AS/CG/SK | CHECKED RS/TB
DATE MAR 2015
SHEET 50 OF 50

P:\Projects\2014\2-14053 - City of Glendale FY 2014 - 2015 Pavement Pres\CAD Files\Sheets\Surface Treatment 242-1360 ST-42-13 (3).dwg 3/24/2015 7:55:01 AM HYAN

APPENDIX D

SLURRY SEAL IMPROVEMENT INDEX

SLURRY SEAL INDEX

TREATMENT	RD_NAME	RD_FROM	RD_TO	RD_LENGTH (FT)	PVMT_WIDTH (FT)	PVMT_AREA (SQ FT)
SLURRY_SEAL_II	N 47TH AVE	W SAN MIGUEL AVE	W MONTEBELLO AVE	255.01	40.5	10327.905
SLURRY_SEAL_II	N 47TH AVE	W MARSHALL AVE	N 48TH LN	392.01	40.5	15876.405
SLURRY_SEAL_II	N 47TH AVE	N 48TH LN	W SAN MIGUEL AVE	333.01	40.5	13486.905
SLURRY_SEAL_II	N 49TH AVE	W SOLANO DR N	W RANCHO DR	142.25	32.5	4623.125
SLURRY_SEAL_II	N 49TH AVE	W RANCHO DR	W PALO VERDE DR	451.77	32.5	14682.525
SLURRY_SEAL_II	N 49TH AVE	W PALO VERDE DR	W BETHANY HOME RD	146.01	42	6132.42
SLURRY_SEAL_II	N 55T HAVE	W WAGONER RD	W UNION HILLS DR	402.78	37	14902.86
SLURRY_SEAL_II	N 55TH AVE	W MICHIGAN AVE	W WAGONER RD	957.11	37	35413.07
SLURRY_SEAL_II	N 55TH AVE	W ANGELA DR	W GROVERS AVE	1319.66	36	47507.76
SLURRY_SEAL_II	N 55TH AVE	W CAMPO BELLO DR	W ANGELA DR	560.82	36	20189.52
SLURRY_SEAL_II	N 55TH AVE	ROUND-A-BOUT	W CAMPO BELLO DR	426.82	36	15365.52
SLURRY_SEAL_II	N 55TH AVE	W BELL RD	ROUND-A-BOUT	713.58	44	31397.52
SLURRY_SEAL_II	N 59TH DR	W OCOTILLO RD	W LAMAR RD	680.63	27	18377.01
SLURRY_SEAL_II	N 59TH DR	W LAMAR RD	W GLENDALE AVE	621.77	27	16787.79
SLURRY_SEAL_II	N 60TH AVE	W LAMAR RD	W GLENDALE AVE	621.51	27	16780.77
SLURRY_SEAL_II	N 60TH AVE	W OCOTILLO RD	W LAMAR RD	682.76	27	18434.52
SLURRY_SEAL_II	N 61ST AVE	W LAWRENCE RD	W LAMAR RD	345.51	33	11401.83
SLURRY_SEAL_II	N 61ST AVE	W LAMAR RD	W LAMAR RD	176.26	33	5816.58
SLURRY_SEAL_II	N 61ST AVE	W LAMAR RD	W GLENDALE AVE	445.26	33	14693.58
SLURRY_SEAL_II	N 61ST AVE	W MARLETTE AVE	W MARLETTE AVE	75.25	44	3311
SLURRY_SEAL_II	N 61ST AVE	ALLEY	W STELLA AVE	160.5	44	7062
SLURRY_SEAL_II	N 61ST AVE	W MARLETTE AVE	ALLEY	160.76	44	7073.44
SLURRY_SEAL_II	N 61ST AVE	W STELLA AVE	W MARYLAND AVE	266.76	44	11737.44
SLURRY_SEAL_II	N 61ST AVE	ALLEY	W CLAREMONT ST	110	44	4840
SLURRY_SEAL_II	N 61ST AVE	ALLEY	W MARLETTE AVE	69.75	44	3069
SLURRY_SEAL_II	N 61ST AVE	W CLAREMONT ST	W CLAREMONT ST	35	44	1540
SLURRY_SEAL_II	N 61ST AVE	W ROSE LN	ALLEY	145.01	44	6380.44
SLURRY_SEAL_II	N 61ST AVE	W CLAREMONT ST	ALLEY	145.25	44	6391
SLURRY_SEAL_II	N 61ST AVE	W KEIM DR	ALLEY	106	44	4664
SLURRY_SEAL_II	N 61ST AVE	ALLEY	W ROSE LN	149	44	6556
SLURRY_SEAL_II	N 61ST AVE	W KEIM DR	W KEIM DR	90	44	3960
SLURRY_SEAL_II	N 61ST AVE	W CAVALIER DR	W KEIM DR	160	44	7040
SLURRY_SEAL_II	N 61ST AVE	W BERRIDGE LN	W CAVALIER DR	250	42	10500
SLURRY_SEAL_II	N 61ST AVE	W BETHANY HOME RD	W BERRIDGE LN	722.57	42	30347.94
SLURRY_SEAL_II	N 62ND AVE	W LAMAR RD	W GLENDALE AVE	439.03	40.5	17780.715
SLURRY_SEAL_II	N 62ND AVE	W LAWRENCE RD	W LAMAR RD	531.79	40.5	21537.495
SLURRY_SEAL_II	N 62ND AVE	W OCOTILLO RD	W LAWRENCE RD	337.27	40.5	13659.435

SLURRY SEAL INDEX

TREATMENT	RD_NAME	RD_FROM	RD_TO	RD_LENGTH (FT)	PVMT_WIDTH (FT)	PVMT_AREA (SQ FT)
SLURRY_SEAL_II	N 63RD AVE	W BELL RD	W GREENBRIAR DR	1775.42	40.5	71904.51
SLURRY_SEAL_II	N 63RD AVE	W DEER VALLEY RD	W LOUISE DR	148.31	32.5	4820.075
SLURRY_SEAL_II	N 63RD AVE	W LOUISE DR	W LOUISE DR	107.17	32.5	3483.025
SLURRY_SEAL_II	N 63RD AVE	W LOUISE DR	W DONALD DR	258.17	32.5	8390.525
SLURRY_SEAL_II	N 63RD AVE	W GREENWAY RD	W ZOE ELLA WAY	180.01	52.5	9450.525
SLURRY_SEAL_II	N 63RD AVE	W ZOE ELLA WAY	W KAREN LEE LN	352.53	52.5	18507.825
SLURRY_SEAL_II	N 63RD AVE	W KAREN LEE LN	W MARY JANE LN	244.27	40.5	9892.935
SLURRY_SEAL_II	N 63RD AVE	W MARY JANE LN	W CAROL ANN WAY	244.02	40.5	9882.81
SLURRY_SEAL_II	N 63RD AVE	W CAROL ANN WAY	W NANCY RD	292.27	40.5	11836.935
SLURRY_SEAL_II	N 63RD AVE	W NANCY RD	W MARCONI AVE	462.53	40.5	18732.465
SLURRY_SEAL_II	N 63RD AVE	W MARCONI AVE	W MARCONI AVE	124.76	40.5	5052.78
SLURRY_SEAL_II	N 63RD AVE	W MARCONI AVE	W MONTE CRISTO AVE	284.52	40.5	11523.06
SLURRY_SEAL_II	N 63RD AVE	W MONTE CRISTO AVE	W MONTE CRISTO AVE	160.26	40.5	6490.53
SLURRY_SEAL_II	N 63RD AVE	W MONTE CRISTO AVE	W PARADISE LN	278.52	52.5	14622.3
SLURRY_SEAL_II	N 63RD AVE	W KINGS AVE	W BELL RD	1153.57	40	46142.8
SLURRY_SEAL_II	N 65TH AVE	S FRONTAGE RD	W BETHANY HOME RD	44.5	39	1735.5
SLURRY_SEAL_II	N 65TH AVE	W RANCHO DR	S FRONTAGE RD	416.5	39	16243.5
SLURRY_SEAL_II	N 65TH AVE	W SOLANO DR	W RANCHO DR	226	39	8814
SLURRY_SEAL_II	N 65TH AVE	W MONTEBELLO AVE	W SOLANO DR	180.75	40	7230
SLURRY_SEAL_II	N 65TH AVE	W SOLANO DR	N 64TH DR	250	40	10000
SLURRY_SEAL_II	N 65TH AVE	N 64TH DR	W SOLANO DR	24	40	960
SLURRY_SEAL_II	N 65TH AVE	W SAN JUAN AVE	W SAN MIGUEL AVE	305	18	5490
SLURRY_SEAL_II	N 65TH AVE	W SAN MIGUEL AVE	W MONTEBELLO AVE	374.25	18	6736.5
SLURRY_SEAL_II	N 71ST AVE	W BEARDSLEY RD	W PONTIAC DR	562.02	32.5	18265.65
SLURRY_SEAL_II	N 71ST AVE	W PONTIAC DR	W TONOPAH DR	223.01	32.5	7247.825
SLURRY_SEAL_II	N 71ST AVE	W TONOPAH DR	W POTTER DR	742.56	32.5	24133.2
SLURRY_SEAL_II	N 71ST AVE	W POTTER DR	W ARROWHEAD LOOP RD	389.85	36.5	14229.525
SLURRY_SEAL_II	N 71ST AVE	W ROSE GARDEN LN	N 70TH DR	291.58	291.58	85018.8964
SLURRY_SEAL_II	N 71ST AVE	N 70TH DR	W FIREBIRD DR	471.81	55	25949.55
SLURRY_SEAL_II	N 71ST AVE	W FIREBIRD DR	W AURORA DR	595.97	55	32778.35
SLURRY_SEAL_II	N 71ST AVE	W AURORA DR	W LONE CACTUS DR	367.87	55	20232.85
SLURRY_SEAL_II	N 71ST AVE	W LONE CACTUS DR	W DEER VALLEY RD	871.34	55	47923.7
SLURRY_SEAL_II	N 71ST AVE	W DEER VALLEY RD	W TINA LN	361.5	40.5	14640.75
SLURRY_SEAL_II	N 71ST AVE	W TINA LN	W TINA LN	190.75	40.5	7725.375
SLURRY_SEAL_II	N 71ST AVE	W TINA LN	W HILLCREST BLVD	800	40.5	32400
SLURRY_SEAL_II	N 75TH LN	W PASADENA AVE	W READE AVE	252.41	32	8077.12
SLURRY_SEAL_II	N 75TH LN	W CAMELBACK RD	W PASADENA AVE	194.23	50	9711.5

SLURRY SEAL INDEX

TREATMENT	RD_NAME	RD_FROM	RD_TO	RD_LENGTH (FT)	PVMT_WIDTH (FT)	PVMT_AREA (SQ FT)
SLURRY_SEAL_II	N 75TH LN	W READE AVE	CUL-DE-SAC	317.26	32	10152.32
SLURRY_SEAL_II	N 83RD DR	W MCLELLAN RD	CUL-DE-SAC	325.5	32.5	10578.75
SLURRY_SEAL_II	N 83RD DR	W MARYLAND AVE	CUL-DE-SAC	303.25	32.5	9855.625
SLURRY_SEAL_II	N 83RD LN	W MCELLAN RD	N 84TH DR	238.05	32.5	7736.625
SLURRY_SEAL_II	N 83RD LN	W MCLELLAN RD	W MCLELLAN RD	225.38	33	7437.54
SLURRY_SEAL_II	N 83RD LN	W MARYLAND AVE	W SIERRA VISTA DR	430.6	33.5	14425.1
SLURRY_SEAL_II	N 84TH DR	N 84TH LN	CUL-DE-SAC	148.23	31	4595.13
SLURRY_SEAL_II	N 84TH DR	W SIERRA VISTA DR	CUL-DE-SAC	441.37	32.5	14344.525
SLURRY_SEAL_II	N 84TH LN	CUL-DE-SAC	N 84TH LN	34.76	85.5	2971.98
SLURRY_SEAL_II	N 84TH LN	W OCOTILLO RD	CUL-DE-SAC	171.49	33	5659.17
SLURRY_SEAL_II	N 84TH LN	N 84TH LN	N 84TH DR	822.2	32.5	26721.5
SLURRY_SEAL_II	N 84TH LN	W SIERRA VISTA DR	N 84TH LN	190.55	32.5	6192.875
SLURRY_SEAL_II	N 85TH AVE	W MARYLAND AVE	W SIERRA VISTA DR	242.38	40.5	9816.39
SLURRY_SEAL_II	N 85TH AVE	W MCLELLAN RD	W TUCKEY LN	255.62	40.5	10352.61
SLURRY_SEAL_II	N 85TH AVE	W TUCKEY LN	W OCOTILLO RD	250.32	40.5	10137.96
SLURRY_SEAL_II	N 85TH AVE	W SIERRA VISTA DR	W MCLELLAN RD	297.28	40.5	12039.84
SLURRY_SEAL_II	N ARROWHEAD LOOP RD	W IRMA LN	W POTTER DR	647.81	55	35629.55
SLURRY_SEAL_II	N ARROWHEAD LOOP RD	W POTTER DR	W ROSE GARDEN LN	727.98	55	40038.9
SLURRY_SEAL_II	W GREENBRIAR DR	W GREENBRIAR DR	N 63RD AVE	369.5	40	14780
SLURRY_SEAL_II	W LAMAR RD	ALLEY	N 59TH AVE	225.28	27	6082.56
SLURRY_SEAL_II	W LAMAR RD	N 59TH DR	ALLEY	223.53	27	6035.31
SLURRY_SEAL_II	W LAMAR RD	N 60TH AVE	ALLEY	221.78	27	5988.06
SLURRY_SEAL_II	W LAMAR RD	ALLEY	N 59TH DR	223.78	27	6042.06
SLURRY_SEAL_II	W LAMAR RD	N 61ST AVE	ALLEY	214.53	27	5792.31
SLURRY_SEAL_II	W LAMAR RD	ALLEY	N 60TH AVE	225.78	27	6096.06
SLURRY_SEAL_II	W LAMAR RD	N 62ND AVE	N 61ST AVE	671.52	31	20817.12
SLURRY_SEAL_II	W LAWRENCE RD	N 62ND AVE	N 61ST AVE	673.4	28.5	19191.9
SLURRY_SEAL_II	W MCLELLAN RD	CUL-DE-SAC	W MCLELLAN RD	72.5	70	5075
SLURRY_SEAL_II	W MCLELLAN RD	N 83RD LN	N 83RD DR	282.04	33	9307.32
SLURRY_SEAL_II	W MCLELLAN RD	N 83RD DR	N 83RD AVE	204.85	33	6760.05
SLURRY_SEAL_II	W MISSOURI AVE	N 45TH AVE	GRAND MISSOURI MHP	342.76	40	13710.4
SLURRY_SEAL_II	W MISSOURI AVE	GRAND MISSOURI MHP	N 43RD AVE	462.26	40	18490.4
SLURRY_SEAL_II	W MISSOURI AVE	GRAND MISSOURI MHP	GRAND MISSOURI MHP	504.26	40	20170.4
SLURRY_SEAL_II	W MISSOURI AVE	W GRAND AVE	N 45TH AVE	1301.77	40	52070.8
SLURRY_SEAL_II	W MONTEBELLO AVE	N 43RD LN	N 43RD DR	229.75	40.5	9304.875
SLURRY_SEAL_II	W MONTEBELLO AVE	N 45TH AVE	N 44TH LN	243.25	40.5	9851.625
SLURRY_SEAL_II	W MONTEBELLO AVE	N 44TH AVE	N 43RD LN	225	40.5	9112.5

SLURRY SEAL INDEX

TREATMENT	RD_NAME	RD_FROM	RD_TO	RD_LENGTH (FT)	PVMT_WIDTH (FT)	PVMT_AREA (SQ FT)
SLURRY_SEAL_II	W MONTEBELLO AVE	N 44TH DR	N 44TH AVE	214.5	40.5	8687.25
SLURRY_SEAL_II	W MONTEBELLO AVE	N 44TH LN	N 44TH DR	224.77	40.5	9103.185
SLURRY_SEAL_II	W MONTEBELLO AVE	N 43RD DR	N 43RD AVE	171	40.5	6925.5
SLURRY_SEAL_II	W MOUNTAIN VIEW RD	N 63RD DR	N 63RD AVE	174.79	40	6991.6
SLURRY_SEAL_II	W MOUNTAIN VIEW RD	N 65TH AVE	N 63RD DR	1143.2	40	45728
SLURRY_SEAL_II	W MOUNTAIN VIEW RD	N 66TH DR	N 65TH AVE	943.17	40	37726.8
SLURRY_SEAL_II	W MOUNTAIN VIEW RD	N 67TH AVE	N 66TH DR	180.28	40	7211.2
SLURRY_SEAL_II	W MYRTLE AVE	ALLEY	N 58TH DR	186.75	28	5229
SLURRY_SEAL_II	W MYRTLE AVE	N 59TH AVE	ALLEY	207	28	5796
SLURRY_SEAL_II	W MYRTLE AVE	ALLEY	N 58TH AVE	183.51	28	5138.28
SLURRY_SEAL_II	W MYRTLE AVE	N 58TH DR	ALLEY	190.01	28	5320.28
SLURRY_SEAL_II	W MYRTLE AVE	ALLEY	N 57TH DR	190	27	5130
SLURRY_SEAL_II	W MYRTLE AVE	N 58TH AVE	ALLEY	186.62	27	5038.74
SLURRY_SEAL_II	W MYRTLE AVE	ALLEY	N 57TH AVE	189.41	27	5114.07
SLURRY_SEAL_II	W MYRTLE AVE	N 57TH DR	ALLEY	190	27	5130
SLURRY_SEAL_II	W OCOTILLO RD	N 84TH LN	N 83RD DR	936.06	41	38378.46
SLURRY_SEAL_II	W OCOTILLO RD	N 83RD DR	N 83RD AVE	213.5	20	4270
SLURRY_SEAL_II	W OCOTILLO RD	W OCOTILLO RD	N 84TH LN	266.77	40.5	10804.185
SLURRY_SEAL_II	W ORANGEWOOD AVE	N 83RD AVE	N 82ND DR	383.04	36	13789.44
SLURRY_SEAL_II	W ORANGEWOOD AVE	N 80TH LN	N 79TH LN	641.32	36	23087.52
SLURRY_SEAL_II	W ORANGEWOOD AVE	N 82ND DR	N 80TH LN	1128.62	36	40630.32
SLURRY_SEAL_II	W ORANGEWOOD AVE	N 79TH LN	N 79TH AVE	493.8	26	12838.8
SLURRY_SEAL_II	W ORANGEWOOD AVE	N 79TH AVE	N 78TH AVE	663.32	38	25206.16
SLURRY_SEAL_II	W ORANGEWOOD AVE	N 78TH AVE	N 77TH LN	655.07	38	24892.66
SLURRY_SEAL_II	W ORANGEWOOD AVE	N 77TH LN	N 75TH AVE	1305.08	38	49593.04
SLURRY_SEAL_II	W PASADENA AVE	N 75TH LN	CUL-DE SAC	505.77	32	16184.64
SLURRY_SEAL_II	W READE AVE	N 75TH LN	CUL-DE-SAC	291.26	32	9320.32
SLURRY_SEAL_II	W ROSE GARDEN LN	N 75TH AVE	N 74TH AVE	880.8	55	48444
SLURRY_SEAL_II	W ROSE GARDEN LN	N 74TH AVE	N 72ND DR	443.86	55	24412.3
SLURRY_SEAL_II	W ROSE GARDEN LN	N 72ND DR	N 71ST AVE	921.34	55	50673.7
SLURRY_SEAL_II	W SIERRA VISTA DR	N 85TH AVE	N 84TH LN	243.9	33	8048.7
SLURRY_SEAL_II	W SIERRA VISTA DR	N 84TH LN	N 84TH DR	250	33	8250
SLURRY_SEAL_II	W SIERRA VISTA DR	N 84TH DR	N 83RD LN	462.68	33	15268.44

APPENDIX E

CRACK SEAL IMPROVEMENT INDEX

CRACK SEAL INDEX

TREATMENT	RD_NAME	RD_FROM	RD_TO	RD_LENGTH (LF)	CRACK_SEAL (LF)
CRACK_SEAL_II	N 47TH AVE	W SAN MIGUEL AVE	W MONTEBELLO AVE	255.01	4,195
CRACK_SEAL_II	N 47TH AVE	W MARSHALL AVE	N 48TH LN	392.01	6,449
CRACK_SEAL_II	N 47TH AVE	N 48TH LN	W SAN MIGUEL AVE	333.01	5,478
CRACK_SEAL_II	N 49TH AVE	W SOLANO DR N	W RANCHO DR	142.25	944
CRACK_SEAL_II	N 49TH AVE	W RANCHO DR	W PALO VERDE DR	451.77	2,937
CRACK_SEAL_II	N 49TH AVE	W PALO VERDE DR	W BETHANY HOME RD	146.01	316
CRACK_SEAL_II	N 55TH AVE	W WAGONER RD	W UNION HILLS DR	402.78	2,054
CRACK_SEAL_II	N 55TH AVE	W MICHIGAN AVE	W WAGONER RD	957.11	4,594
CRACK_SEAL_II	N 55TH AVE	W ANGELA DR	W GROVERS AVE	1319.66	7,786
CRACK_SEAL_II	N 55TH AVE	W CAMPO BELLO DR	W ANGELA DR	560.82	3,141
CRACK_SEAL_II	N 55TH AVE	ROUND-A-BOUT	W CAMPO BELLO DR	426.82	2,646
CRACK_SEAL_II	N 55TH AVE	W BELL RD	ROUND-A-BOUT	713.58	4,424
CRACK_SEAL_II	N 59TH DR	W OCOTILLO RD	W LAMAR RD	680.63	6,806
CRACK_SEAL_II	N 59TH DR	W LAMAR RD	W GLENDALE AVE	621.77	4,166
CRACK_SEAL_II	N 60TH AVE	W LAMAR RD	W GLENDALE AVE	621.51	4,910
CRACK_SEAL_II	N 60TH AVE	W OCOTILLO RD	W LAMAR RD	682.76	5,803
CRACK_SEAL_II	N 61ST AVE	W LAWRENCE RD	W LAMAR RD	345.51	3,006
CRACK_SEAL_II	N 61ST AVE	W LAMAR RD	W LAMAR RD	176.26	1,533
CRACK_SEAL_II	N 61ST AVE	W LAMAR RD	W GLENDALE AVE	445.26	3,339
CRACK_SEAL_II	N 61ST AVE	W MARLETTE AVE	W MARLETTE AVE	75.25	502
CRACK_SEAL_II	N 61ST AVE	ALLEY	W STELLA AVE	160.5	1,070
CRACK_SEAL_II	N 61ST AVE	W MARLETTE AVE	ALLEY	160.76	1,072
CRACK_SEAL_II	N 61ST AVE	W STELLA AVE	W MARYLAND AVE	266.76	1,778
CRACK_SEAL_II	N 61ST AVE	ALLEY	W CLAREMONT ST	110	733
CRACK_SEAL_II	N 61ST AVE	ALLEY	W MARLETTE AVE	69.75	465
CRACK_SEAL_II	N 61ST AVE	W CLAREMONT ST	W CLAREMONT ST	35	233
CRACK_SEAL_II	N 61ST AVE	W ROSE LN	ALLEY	44	967
CRACK_SEAL_II	N 61ST AVE	W CLAREMONT ST	ALLEY	145.25	968
CRACK_SEAL_II	N 61ST AVE	W KEIM DR	ALLEY	106	707
CRACK_SEAL_II	N 61ST AVE	ALLEY	W ROSE LN	149	993
CRACK_SEAL_II	N 61ST AVE	W KEIM DR	W KEIM DR	90	600
CRACK_SEAL_II	N 61ST AVE	W CAVALIER DR	W KEIM DR	160	1,067
CRACK_SEAL_II	N 61ST AVE	W BERRIDGE LN	W CAVALIER DR	250	1,667
CRACK_SEAL_II	N 61ST AVE	W BETHANY HOME RD	W BERRIDGE LN	722.57	4,817

CRACK SEAL INDEX

TREATMENT	RD_NAME	RD_FROM	RD_TO	RD_LENGTH (LF)	CRACK_SEAL (LF)
CRACK_SEAL_II	N 62ND AVE	W LAMAR RD	W GLENDALE AVE	439.03	5,488
CRACK_SEAL_II	N 62ND AVE	W LAWRENCE RD	W LAMAR RD	531.79	6,913
CRACK_SEAL_II	N 62ND AVE	W OCOTILLO RD	W LAWRENCE RD	337.27	2,248
CRACK_SEAL_II	N 63RD AVE	W BELL RD	W GREENBRIAR DR	1775.42	9,942
CRACK_SEAL_II	N 63RD AVE	W DEER VALLEY RD	W LOUISE DR	148.31	630
CRACK_SEAL_II	N 63RD AVE	W LOUISE DR	W LOUISE DR	107.17	455
CRACK_SEAL_II	N 63RD AVE	W LOUISE DR	W DONALD DR	258.16	1,097
CRACK_SEAL_II	N 63RD AVE	W GREENWAY RD	W ZOE ELLA WAY	180.01	2,286
CRACK_SEAL_II	N 63RD AVE	W ZOE ELLA WAY	W KAREN LEE LN	352.53	4,477
CRACK_SEAL_II	N 63RD AVE	W KAREN LEE LN	W MARY JANE LN	244.27	2,663
CRACK_SEAL_II	N 63RD AVE	W MARY JANE LN	W CAROL ANN WAY	244.02	2,660
CRACK_SEAL_II	N 63RD AVE	W CAROL ANN WAY	W NANCY RD	292.27	3,186
CRACK_SEAL_II	N 63RD AVE	W NANCY RD	W MARCONI AVE	462.53	4,857
CRACK_SEAL_II	N 63RD AVE	W MARCONI AVE	W MARCONI AVE	124.76	1,510
CRACK_SEAL_II	N 63RD AVE	W MARCONI AVE	W MONTE CRISTO AVE	284.52	3,443
CRACK_SEAL_II	N 63RD AVE	W MONTE CRISTO AVE	W MONTE CRISTO AVE	160.26	1,939
CRACK_SEAL_II	N 63RD AVE	W MONTE CRISTO AVE	W PARADISE LN	278.52	3,371
CRACK_SEAL_II	N 63RD AVE	W KINGS AVE	W BELL RD	1153.57	13,497
CRACK_SEAL_II	N 65TH AVE	S FRONTAGE RD	W BETHANY HOME RD	44.5	478
CRACK_SEAL_II	N 65TH AVE	W RANCHO DR	S FRONTAGE RD	416.5	4,477
CRACK_SEAL_II	N 65TH AVE	W SOLANO DR	W RANCHO DR	226	2,430
CRACK_SEAL_II	N 65TH AVE	W MONTEBELLO AVE	W SOLANO DR	180.75	1,889
CRACK_SEAL_II	N 65TH AVE	W SOLANO DR	N 64TH DR	250	2,613
CRACK_SEAL_II	N 65TH AVE	N 64TH DR	W SOLANO DR	24	251
CRACK_SEAL_II	N 65TH AVE	W SAN JUAN AVE	W SAN MIGUEL AVE	305	2,120
CRACK_SEAL_II	N 65TH AVE	W SAN MIGUEL AVE	W MONTEBELLO AVE	374.25	2,601
CRACK_SEAL_II	N 71ST AVE	W BEARDSLEY RD	W PONTIAC DR	562.02	1,489
CRACK_SEAL_II	N 71ST AVE	W PONTIAC DR	W TONOPAH DR	223.01	881
CRACK_SEAL_II	N 71ST AVE	W TONOPAH DR	W POTTER DR	742.56	2,933
CRACK_SEAL_II	N 71ST AVE	W POTTER DR	W ARROWHEAD LOOP RD	389.85	1,072
CRACK_SEAL_II	N 71ST AVE	W ROSE GARDEN LN	N 70TH DR	291.58	729
CRACK_SEAL_II	N 71ST AVE	N 70TH DR	W FIREBIRD DR	471.81	1,180
CRACK_SEAL_II	N 71ST AVE	W FIREBIRD DR	W AURORA DR	595.97	1,987
CRACK_SEAL_II	N 71ST AVE	W AURORA DR	W LONE CACTUS DR	367.87	2,649

CRACK SEAL INDEX

TREATMENT	RD_NAME	RD_FROM	RD_TO	RD_LENGTH (LF)	CRACK_SEAL (LF)
CRACK_SEAL_II	N 71ST AVE	W LONE CACTUS DR	W DEER VALLEY RD	871.34	4,662
CRACK_SEAL_II	N 71ST AVE	W DEER VALLEY RD	W TINA LN	361.5	1,573
CRACK_SEAL_II	N 71ST AVE	W TINA LN	W TINA LN	190.75	830
CRACK_SEAL_II	N 71ST AVE	W TINA LN	W HILLCREST BLVD	800	3,720
CRACK_SEAL_II	N 75TH LN	W PASADENA AVE	W READE AVE	252.41	644
CRACK_SEAL_II	N 75TH LN	W CAMELBACK RD	W PASADENA AVE	194.23	660
CRACK_SEAL_II	N 75TH LN	W READE AVE	CUL-DE-SAC	317.26	635
CRACK_SEAL_II	N 83RD DR	W MCLELLAN RD	CUL-DE-SAC	325.5	2,170
CRACK_SEAL_II	N 83RD DR	W MARYLAND AVE	CUL-DE-SAC	303.25	2,022
CRACK_SEAL_II	N 83RD LN	W MCELLAN RD	N 84TH DR	238.05	1,587
CRACK_SEAL_II	N 83RD LN	W MCLELLAN RD	W MCLELLAN RD	225.38	1,503
CRACK_SEAL_II	N 83RD LN	W MARYLAND AVE	W SIERRA VISTA DR	430.6	2,871
CRACK_SEAL_II	N 84TH DR	N 84TH LN	CUL-DE-SAC	148.23	988
CRACK_SEAL_II	N 84TH DR	W SIERRA VISTA DR	CUL-DE-SAC	441.37	2,942
CRACK_SEAL_II	N 84TH LN	CUL-DE-SAC	N 84TH LN	34.76	232
CRACK_SEAL_II	N 84TH LN	W OCOTILLO RD	CUL-DE-SAC	171.49	1,143
CRACK_SEAL_II	N 84TH LN	N 84TH LN	N 84TH DR	822.2	5,481
CRACK_SEAL_II	N 84TH LN	W SIERRA VISTA DR	N 84TH LN	190.55	1,270
CRACK_SEAL_II	N 85TH AVE	W MARYLAND AVE	W SIERRA VISTA DR	242.38	1,616
CRACK_SEAL_II	N 85TH AVE	W MCLELLAN RD	W TUCKEY LN	255.62	1,704
CRACK_SEAL_II	N 85TH AVE	W TUCKEY LN	W OCOTILLO RD	250.32	1,669
CRACK_SEAL_II	N 85TH AVE	W SIERRA VISTA DR	W MCLELLAN RD	297.28	1,982
CRACK_SEAL_II	N ARROWHEAD LOOP RD	W IRMA LN	W POTTER DR	647.81	2,656
CRACK_SEAL_II	N ARROWHEAD LOOP RD	W POTTER DR	W ROSE GARDEN LN	727.98	1,674
CRACK_SEAL_II	W GREENBRIAR DR	W GREENBRIAR DR	N 63RD AVE	369.5	462
CRACK_SEAL_II	W LAMAR RD	ALLEY	N 59TH AVE	225.28	2,253
CRACK_SEAL_II	W LAMAR RD	N 59TH DR	ALLEY	223.53	2,235
CRACK_SEAL_II	W LAMAR RD	N 60TH AVE	ALLEY	221.78	2,218
CRACK_SEAL_II	W LAMAR RD	ALLEY	N 59TH DR	223.78	2,238
CRACK_SEAL_II	W LAMAR RD	N 61ST AVE	ALLEY	214.53	2,145
CRACK_SEAL_II	W LAMAR RD	ALLEY	N 60TH AVE	225.78	2,258
CRACK_SEAL_II	W LAMAR RD	N 62ND AVE	N 61ST AVE	671.52	7,555
CRACK_SEAL_II	W LAWRENCE RD	N 62ND AVE	N 61ST AVE	673.4	4,489
CRACK_SEAL_II	W MCLELLAN RD	CUL-DE-SAC	W MCLELLAN RD	72.5	483

CRACK SEAL INDEX

TREATMENT	RD_NAME	RD_FROM	RD_TO	RD_LENGTH (LF)	CRACK_SEAL (LF)
CRACK_SEAL_II	W MCLELLAN RD	N 83RD LN	N 83RD DR	282.04	1,880
CRACK_SEAL_II	W MCLELLAN RD	N 83RD DR	N 83RD AVE	204.85	1,366
CRACK_SEAL_II	W MISSOURI AVE	N 45TH AVE	GRAND MISSOURI MHP	342.76	2,285
CRACK_SEAL_II	W MISSOURI AVE	GRAND MISSOURI MHP	N 43RD AVE	462.26	3,082
CRACK_SEAL_II	W MISSOURI AVE	GRAND MISSOURI MHP	GRAND MISSOURI MHP	504.26	3,362
CRACK_SEAL_II	W MISSOURI AVE	W GRAND AVE	N 45TH AVE	1301.77	8,678
CRACK_SEAL_II	W MONTEBELLO AVE	N 43RD LN	N 43RD DR	229.75	1,838
CRACK_SEAL_II	W MONTEBELLO AVE	N 45TH AVE	N 44TH LN	243.25	1,946
CRACK_SEAL_II	W MONTEBELLO AVE	N 44TH AVE	N 43RD LN	225	1,800
CRACK_SEAL_II	W MONTEBELLO AVE	N 44TH DR	N 44TH AVE	214.5	1,716
CRACK_SEAL_II	W MONTEBELLO AVE	N 44TH LN	N 44TH DR	224.77	1,798
CRACK_SEAL_II	W MONTEBELLO AVE	N 43RD DR	N 43RD AVE	171	1,368
CRACK_SEAL_II	W MOUNTAIN VIEW RD	N 63RD DR	N 63RD AVE	174.79	1,835
CRACK_SEAL_II	W MOUNTAIN VIEW RD	N 65TH AVE	N 63RD DR	1143.2	12,004
CRACK_SEAL_II	W MOUNTAIN VIEW RD	N 66TH DR	N 65TH AVE	943.17	8,206
CRACK_SEAL_II	W MOUNTAIN VIEW RD	N 67TH AVE	N 66TH DR	180.28	1,568
CRACK_SEAL_II	W MYRTLE AVE	ALLEY	N 58TH DR	186.75	623
CRACK_SEAL_II	W MYRTLE AVE	N 59TH AVE	ALLEY	207	690
CRACK_SEAL_II	W MYRTLE AVE	ALLEY	N 58TH AVE	183.51	612
CRACK_SEAL_II	W MYRTLE AVE	N 58TH DR	ALLEY	190.01	633
CRACK_SEAL_II	W MYRTLE AVE	ALLEY	N 57TH DR	190	1,397
CRACK_SEAL_II	W MYRTLE AVE	N 58TH AVE	ALLEY	186.62	1,372
CRACK_SEAL_II	W MYRTLE AVE	ALLEY	N 57TH AVE	189.41	1,421
CRACK_SEAL_II	W MYRTLE AVE	N 57TH DR	ALLEY	190	1,425
CRACK_SEAL_II	W OCOTILLO RD	N 84TH LN	N 83RD DR	936.06	6,240
CRACK_SEAL_II	W OCOTILLO RD	N 83RD DR	N 83RD AVE	1144.06	1,423
CRACK_SEAL_II	W OCOTILLO RD	W OCOTILLO RD	N 84TH LN	266.77	1,778
CRACK_SEAL_II	W ORANGEWOOD AVE	N 83RD AVE	N 82ND DR	383.04	958
CRACK_SEAL_II	W ORANGEWOOD AVE	N 80TH LN	N 79TH LN	641.32	834
CRACK_SEAL_II	W ORANGEWOOD AVE	N 82ND DR	N 80TH LN	1128.62	1,467
CRACK_SEAL_II	W ORANGEWOOD AVE	N 79TH LN	N 79TH AVE	493.8	741
CRACK_SEAL_II	W ORANGEWOOD AVE	N 79TH AVE	N 78TH AVE	663.32	2,786
CRACK_SEAL_II	W ORANGEWOOD AVE	N 78TH AVE	N 77TH LN	655.07	2,751
CRACK_SEAL_II	W ORANGEWOOD AVE	N 77TH LN	N 75TH AVE	1305.08	5,742

CRACK SEAL INDEX

TREATMENT	RD_NAME	RD_FROM	RD_TO	RD_LENGTH (LF)	CRACK_SEAL (LF)
CRACK_SEAL_II	W PASADENA AVE	N 75TH LN	CUL-DE SAC	505.77	2,352
CRACK_SEAL_II	W READE AVE	N 75TH LN	CUL-DE-SAC	291.26	1,951
CRACK_SEAL_II	W ROSE GARDEN LN	N 75TH AVE	N 74TH AVE	880.8	4,580
CRACK_SEAL_II	W ROSE GARDEN LN	N 74TH AVE	N 72ND DR	443.86	3,218
CRACK_SEAL_II	W ROSE GARDEN LN	N 72ND DR	N 71ST AVE	921.34	6,680
CRACK_SEAL_II	W SIERRA VISTA DR	N 85TH AVE	N 84TH LN	243.9	1,626
CRACK_SEAL_II	W SIERRA VISTA DR	N 84TH LN	N 84TH DR	250	1,667
CRACK_SEAL_II	W SIERRA VISTA DR	N 84TH DR	N 83RD LN	462.68	3,085

APPENDIX F

ASPHALT REPAIR AREA IMPROVEMENT INDEX

ASPHALT REPAIR INDEX

TREATMENT	RD_NAME	LOCATION	PVMT_AREA (SF)
Asphalt_Repair_II	N 47TH AVE	5529 N 47TH AVE	200
Asphalt_Repair_II	N 47TH AVE	5535 N 47TH AVE	80
Asphalt_Repair_II	N 47TH AVE	5626 N 47TH AVE	4
Asphalt_Repair_II	N 47TH AVE	5620 N 47TH AVE	45
Asphalt_Repair_II	N 47TH AVE	5601 N 47TH AVE	4
Asphalt_Repair_II	N 59TH DR	6717 N 59TH DR	136
Asphalt_Repair_II	N 59TH DR	6713 N 59TH DR	320
Asphalt_Repair_II	N 59TH DR	6709 N 59TH DR	136
Asphalt_Repair_II	N 60TH AVE	6808 N 60TH AVE	18
Asphalt_Repair_II	N 63RD AVE	22350 N 63RD AVE	810
Asphalt_Repair_II	N 65TH AVE	5607 N 65TH AVE	12
Asphalt_Repair_II	N 65TH AVE	5601 N 65TH AVE	60
Asphalt_Repair_II	N 71ST AVE	21925 N 71ST AVE	24
Asphalt_Repair_II	N 75TH LN	5128 N 75TH LN	182
Asphalt_Repair_II	N 75TH LN	5134 N 75TH LN	100
Asphalt_Repair_II	N 75TH LN	5119 N 75TH LN	15
Asphalt_Repair_II	W LAMAR RD	6115 W LAMAR RD	280
Asphalt_Repair_II	W MONTEBELLO AVE	4544 W MONTEBELLO AVE	9
Asphalt_Repair_II	W ROSE GARDEN LN	7405 W ROSE GARDEN LN	49.5