

Contract Documents  
for:

**2015 MAINTENANCE IMPROVEMENT PROGRAM  
HMA Patching, Milling and Resurfacing**

**City of Franklin, Indiana**

**April 20, 2015**



5925 Lakeside Blvd., Indianapolis, Indiana 46278 317-290-9549

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**2015 MAINTENANCE IMPROVEMENT PROGRAM  
HMA Milling and Resurfacing  
CITY OF FRANKLIN, INDIANA**

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## 2015 MAINTENANCE IMPROVEMENT PROGRAM

### HMA Patching, Milling and Resurfacing

CITY OF FRANKLIN, INDIANA

#### ADVERTISEMENT FOR BIDS

The City of Franklin, Indiana will receive bids for the 2015 Maintenance Improvement Program – HMA Patching, Milling and Resurfacing, Franklin, Indiana, all in accordance with the Contract Documents, Construction Schedule and Specifications. Bids will be received until **8:30 AM, prevailing time, on June 3rd, 2015** at the Franklin City Hall, 70 E. Monroe St, Franklin, IN 46131 at which time all bids will be publicly opened and read aloud. Bids received after that time will be returned unopened. A pre-bid meeting will be held on Wednesday, May 27<sup>th</sup> at 9:00AM at the Franklin City Hall, Council Chambers, located at 70 E Monroe Street. All questions on the contract will be answered at that meeting.

The work shall consist of asphalt milling, placement of hot mix asphalt patching and hot mix asphalt resurfacing for streets and alleys and all other work necessary for roadway restoration and as included in the Construction Schedule and Specifications for the 2015 Maintenance Improvement Program, HMA Patching, Milling, and Resurfacing contract documents.

Contract Documents are on file and may be examined at the Franklin City Hall, 70 E. Monroe St, Franklin, IN 46131.

The Proposal must be made on the forms provided in the Contract Documents. Each bid shall be accompanied by a cashier's or certified check, drawn on an acceptable bank, or an acceptable bidder's bond, in an amount not less than five percent (5%) of the total amount of the bid, payable to the City of Franklin, Indiana.

The bidder to whom a contract for work is awarded will be required to furnish a Maintenance and Payment Bond executed on the specified forms and acceptable to the District, in the amount of one hundred percent (100%) of the Contract.

The Bidder (proposer) must supply all the information required by the bid proposal form.

Liquidated damages for delay will be as provided in the Bid Proposal.

Work hours will be as provided in the Technical Specifications.

Partial payment will be made monthly based on an approved payment requisition.

The Contractor and all subcontractors will be required to comply with required Federal and State labor regulations including Equal Employment Opportunity, E-Verify, Non-segregated Facilities, and Affirmative Action requirements.

The City of Franklin, Indiana, reserves the right to reject any and all proposals or parts there-of and to waive all responsibility for irregularities in bids. Bids may be held by the City of Franklin, Indiana, for a period of not to exceed sixty (60) days from the date of the opening of the bids for the purpose of reviewing the bids and the investigation of the qualifications of bidders, prior to awarding of the Contract. It is anticipated, however, that the contract will be awarded on **July 6th, 2015**.

CITY OF FRANKLIN, INDIANA  
Authorized By: CITY COUNCIL

Date: \_\_\_\_\_

# 2015 MAINTENANCE IMPROVEMENT PROGRAM

## HMA Patching, Milling and Resurfacing

### CITY OF FRANKLIN, INDIANA

#### INSTRUCTIONS TO BIDDERS

1. Each Proposal shall be legibly written or printed in ink, on the Proposal form provided in this bound copy of proposed Contract Documents. No alterations in Proposals, or in the printed forms therefore, by erasures, interpolations, or otherwise will be acceptable unless each such alteration is signed or initialed by the Bidder; if initialed, the City of Franklin, Indiana may require the Bidder to identify any alteration so initialed. No alteration in any Proposal, or in the Proposal form on which it is submitted, shall be made by the person after the Proposal has been submitted by the Bidder. Any and all addenda to the Contract Documents in which a Proposal is based, properly signed by the Bidder, shall accompany the Proposal when submitted.

Each Proposal submitted shall be enclosed in a sealed enveloped, addressed to the **City of Franklin**, identified on the outside with the words "**Proposal for the 2015 Maintenance Improvement Program, HMA Patching, Milling and Resurfacing, City of Franklin, Indiana**", and identifying the Bidder. Proposals shall be delivered to The City of Franklin on or before the time and date specified in the Request for Bids, at which time they will be publicly opened and read.

2. Each Proposal shall be accompanied by either a cashier's check, a certified check drawn on an acceptable bank, or an acceptable bid bond, in an amount of not less than five percent (5%) of the total amount of the bid, made payable without conditions to the "City of Franklin, Indiana", hereinafter referred to as the Owner, and the amount of the said Proposal Guarantee may be retained by and forfeited to the Owner as liquidated damages if the Proposal covered thereby is accepted and a contract based thereon is awarded and the Bidder should fail to enter into a Contract in the form prescribed, with legally responsible sureties, within fifteen (15) days after such award is made by the Owner.

The Proposal guarantee deposit of the unsuccessful Bidder will be returned if and when his Proposal is rejected. The Proposal guarantee deposit of the Bidder to whom a Contract is awarded will be returned provided, and when, said successful Bidder executes a Contract and files satisfactory bonds as hereinafter stipulated. The Proposal guarantee deposit of the second lowest responsive Bidder may be retained for a period not to exceed sixty (60) days pending the execution of the Contract and bonds by the successful Bidder.

3. As outlined in Part II, Section I, Contractor's Bid for Public Works, the Bidder shall furnish a statement of whether he is now or ever has been engaged in any work similar to that covered by the Specifications herein, the year in which such work was performed and the manner of its execution, and giving such other information as will tend to show the Bidder's ability to prosecute the required work. The Bidder may be required to furnish a financial statement showing funds available for the immediate execution of the work and also a statement of plant and equipment which he proposes to use and which is immediately available for execution of the work. Lists of plant and equipment shall be submitted in accordance with the following form:

#### MINIMUM PLANT TO BE USED ON THE WORK

<u>Name</u>	<u>Type</u>	<u>Capacity</u>	<u>Condition</u>
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4. Each Bidder shall carefully examine the Plans, Specifications, and other Contract Documents, shall visit the site and fully inform himself of all conditions affecting the work or the cost thereof, and shall be presumed to have done so and his Proposal shall be based upon his own conclusion from such examination. Each Bidder shall inform himself concerning all Federal, State and Local laws, ordinances or regulations which may in any manner affect his proposed operations of construction, or those engaged or employed on the work or the material or equipment. Should a Bidder find discrepancies in, or omissions from, the Plans, Specifications or other Contract Documents, he should at once notify the Engineer and obtain clarification or interpretation prior to submitting any Proposal. Any interpretation of the proposed Contract Documents will be made only by addendum duly issued and a copy of such addendum will be mailed or delivered to each person obtaining a set of such documents from the Engineer. The Owner will not be responsible for any other explanations or interpretations of the proposed Contract Documents.

5. Where various utilities or structures are shown on the plans, the location cannot be assumed exact. These utilities and/ or structures are plotted on the plans only for the Contractor's general information. It shall not be interpreted that the utilities or structures will be found or encountered as shown. Other utilities or structures may also be found and encountered which are not indicated on the plans, such as residential services, etc.

It is the Contractor's responsibility to locate all utilities or structures.

The contractor shall contact all local utility companies and inquire if they have any above ground or underground facilities or structures within the limits of construction. If facilities or structures are within the limits, the Contractor shall request the involved utility(ies) to furnish maps or drawings showing the exact location of such facilities and/ or structures. The Contractor shall also request utility(ies) to make field locations of such facilities and/or structures.

For the purposes of clarification, public utilities shall be defined as all water mains and services, storm drains, field tiles and any other utility which is publicly owned. All private utilities shall be defined as all gas mains and services, underground or overhead telephone and electrical lines, cable T.V. lines and all other privately owned utility lines.

All encountered public and private utilities or structures which are not in direct conflict may be relocated or temporarily removed by a method acceptable to the affected utility, at the complete expense of the Contractor. All encountered private utilities or structures which are in direct conflict or interference shall be relocated and the conflict or interference shall be relocated at the expense of the utility company. A direct conflict shall exist when an existing underground structure or utility line lies within the construction area or within 24" in depth of the construction area. Said relocation and replacement shall be done by the involved utility only, unless that utility approves in writing that the work may be done by the contractor, and in such event said approval shall be forwarded to the Engineer, signed by an authorized agent of the utility involved prior to the Contractor's commencement of work.

If the encountered public utilities and/or structures are in direct conflict, the Contractor shall make permanent changes (which are not indicated as changes on the plans or indicated in the specifications) in the location of any new pipes or other structures which are a part of the contract. The costs for making such changes (not shown on the plans or indicated in the specifications) over and above the cost of the work that is originally shown or specified, will be paid for as extra work in accordance with the INDOT Standard Specifications.

All encountered public utilities or structures which are not in direct conflict shall be relocated at the expense of the contractor.

6. Each Bidder to whom a contract for the work is awarded shall be required to furnish surety as follows:

Performance, Maintenance and Payment Bond. A contract bond to the Owner, in an amount equal to 100 percent (100%) of the contract price.

The bonds shall be executed in three (3) counterparts on the forms bound herein, signed by a surety company authorized to do business in the State of Indiana and acceptable as surety to the Owner.

7. No Bidder may submit more than one Proposal. Two Proposals under different names will not be received from one firm or association.
8. No Bidder may withdraw his Proposal for a period of sixty (60) days after the date and hour set for the opening herewith. A Bidder may withdraw his Proposal at any time prior to the expiration of the period during which Proposals may be submitted, by written request of the same person or persons who signed the Proposal.
9. The Owner reserves the right to accept the Proposal which, in its judgment, is the lowest and best response; to reject any or all Proposals; and to waive irregularities or informalities in any Proposal submitted. Proposals received after the specified time of closing will be returned unopened.

10. None of the Instructions to Bidders, Proposal, Performance, Maintenance and Payment Bond, Contract Agreement, General Conditions, or Specifications shall be removed from the bound copy of the Contract Documents prior to filing the Proposal contained therein.
11. Each Bidder shall sign his Proposal, using his usual signature and giving his full business address. Proposals by partnerships shall be signed with the partnership named followed by the signature of one of the members of the partnership or by an authorized representative and designation of the person signing. Proposals by corporations shall be signed with the name of the corporation, followed by the signature and designation of the president, secretary, or other person authorized to bind it in the matter. The names of all persons signing shall also be typed or printed below the signature. A Proposal by a person who affixes to his signature the word "president", "secretary", "agent", or other designation, without disclosing his principal, may be held to be the Proposal of the individual signing. When requested by the Owner, satisfactory evidence of the authority of the officer signing on behalf of a corporation shall be furnished.
12. Attention of Bidders is particularly called to the requirement for ensuring that employees and applicants for employment are not discriminated against because of their race, color, religion, sex, or national origin.

The Contractor and all subcontractors will be required to comply with required Federal and State labor regulations including Equal Employment Opportunity, Non-segregated Facilities, E-Verify, and Affirmative Action requirements as set forth in the Specifications.

13. Each Bidder shall include in his Proposal the following information:

Firm:  
Name:  
Treasury Number:  
Address:  
City, State and Zip Code:

13. The Engineer is First Group Engineering, 5925 Lakeside Blvd., Indianapolis, Indiana 46278, Telephone Number (317) 290-9549, attention Shawn Strange. All questions are to be submitted in writing at least 1 business day prior to the bid opening. All questions shall be emailed to [sstrange@firstgroupengineering.com](mailto:sstrange@firstgroupengineering.com) or faxed to 317-290-9560.
14. All applicable laws, ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the project shall apply to the contract throughout.
15. Contractor affirms under penalties for perjury that Contractor does not knowingly employ unauthorized aliens. The Contractor also acknowledges that the Contractor has or will enroll in and verify work eligibility status of all of Contractor's newly hired employees through the E-Verify program as defined by Indiana Code 22-5-1.7-3. The Contractor is not required to participate in the E-Verify program should it cease to exist or if the Contractor is self-employed and has no employees. The Contractor shall not knowingly employ or contract with an unauthorized alien and shall not retain an employee or contract with a person that the Contractor subsequently learns is an unauthorized alien. The Contractor will require all subcontractors who perform work under this contract to certify to the Contractor that the subcontractor does not knowingly employ or contract with an unauthorized alien and that the subcontractor has enrolled and is participating in the E-Verify program. The Contractor agrees to maintain this certification throughout the duration of the term of the contract with the subcontractor. If the Contractor fails to cure a breach of this paragraph for a period of more than thirty (30) days, the Owner may terminate this agreement.

**2015 MAINTENANCE IMPROVEMENT PROGRAM  
HMA Patching, Milling and Resurfacing  
CITY OF FRANKLIN, INDIANA**

**PROPOSAL**

TO THE CITY COUNCIL

- The Undersigned Bidder declares that he has read the Specifications and other Contract Documents, has examined and understands the Plans, has examined the site of the work and has determined for himself the conditions affecting the work, and he proposes and agrees if this Proposal is accepted to provide, at his own expense, all labor, insurance, superintendence, machinery, plant, equipment, tools, apparatus, appliances and means of construction, and all materials and supplies, and to complete ready for its intended purpose, the entire work and all parts thereof described as included under the Contract herein bid upon, in the manner and items prescribed, including all work incidental thereto, according to the Plans, Project and Indiana Department of Transportation (INDOT) Specifications (2014 issue), Town and INDOT Standard Drawings and such instructions as the Engineer may give.
- The Undersigned Bidder, in compliance with the Contract Documents dated April 20, 2015, hereby proposes to do the work called for in said Specifications and other Contract Documents and as shown on said Plans for the said work at the following rates and prices:



**Bid Table - Streets**

Pay Item #	Work Summary Table	Pay Item Description	Quantity	Unit		Unit Price	Pay Item Cost
		Mobilization and Demobilization	1	LS	@		
2		Maintaining Traffic	1	LS	@		
6	1	HMA Surface For Streets, Type C	7438	Tons	@		
13	1	Milling, 1.5"	78,855	SYS	@		
14	1	Compacted Aggregate for Patching, # 53	1244	Tons	@		
15	1	HMA for Patching, Type C	841	Tons	@		
16	1	PCCP, 8" for Patching	346	SYS	@		
17	1	Crack Seal	493	LFT	@		
18	1	Glassgrid	9526	SYS	@		
10		Restore Pavement Markings, Long Lines, Paint, Undistributed	1	LS	@		
11		Restore Pavement Markings, Dashed Lines, Paint, Undistributed	1	LS	@		
12		Restore Pavement Markings, Arrows, Paint, Undistributed	1	LS	@		
13		Restore Pavement Markings, Transverse Marking, Paint, Stop Line, 24", Undistributed	1	LS	@		
<b>Total Street Bid</b>							



# Engineer's Estimate Alleys

Pay Item #	Work Summary Table	Pay Item Description	Quantity	Unit	Unit Price	Pay Item Cost
1		Mobilization and Demobilization	1	LS @		
2		Construction Engineering & Layout	1	LS @		
3	2	HMA Removal & Common Excavation	3901	CYS @		
4	2	Compacted Aggregate for Undercut Backfill, #53	472	Tons @		
6	2	HMA Surface For Alleys, Type B	2380	Tons @		
8	2	Compacted Aggregate for Base, # 53	4722	Tons @		
9	2	Manhole, Adjust to Grade	21	EA @		
10	2	Concrete Patch, Remove	4	EA @		
11	2	Ditch Grading	30	LFT @		
12	2	Concrete Curb, 6"	403	LFT @		
<b>Total Alley Bid =</b>						
<b>TOTAL BID =</b>						

All Prospective Bidders are required to submit unit prices and their extensions on all items included in this Proposal. In the event of an omitted extension or mistake in the extension total, the designated unit price amount shall govern to determine the corrected extension amount.

- The Undersigned Bidder understands that the above quantities of work to be done are approximate only and are intended principally to serve as a guide in evaluating the bids.
- The Undersigned agrees, upon written notice of the acceptance of this bid, that he will execute the Contract in accordance with the bid as accepted and give Performance, Maintenance and Payment Bond on the forms included herein within seven (7) days after the prescribed forms are presented for signature.
- The Undersigned further agrees that, if awarded the Contract, he will commence work within SEVEN (7) calendar days after receipt of Notice to Proceed, and that he will complete the work within the time period allotted in the Technical Specifications of this contract.



6. As an evidence of good faith in submitting this Proposal, the Undersigned encloses either a cashier's check, a certified check drawn on an acceptable bank, or an acceptable Bid Bond in the amount of not less than five percent (5%) of the total amount of the bid, which in case he refuses or fails to accept an award and to enter into a Contract and file the required bonds within the prescribed time, shall be forfeited damages to the City of Franklin, Indiana, as liquidated damages.
7. The Undersigned hereby declares that the only parties interested in this Proposal are named herein, that this Proposal is made without collusion with any other person, firm or corporation, that no member of the Town Council, officer or agent of the City of Franklin, Indiana is directly or indirectly financially interested in this bid.
8. Addenda No. \_\_\_\_\_ was received and considered in the preparation of this bid.

SIGNATURE OF BIDDER:

If an Individual: \_\_\_\_\_, doing business as  
\_\_\_\_\_

If a Partnership: \_\_\_\_\_

By: \_\_\_\_\_, member of firm

If a Corporation: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

Business Address of Bidder: \_\_\_\_\_

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BID OF

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(Contractor)

---

(Address)

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FOR  
PUBLIC WORKS PROJECTS  
OF

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Filed \_\_\_\_\_, \_\_\_\_\_

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Action taken \_\_\_\_\_

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# CONTRACTORS BID FOR PUBLIC WORK

## PART 1

(To be completed for all bids)  
(Please type or print)

Date: \_\_\_\_\_

1. Governmental Unit (Owner): City of Franklin

2. County: Johnson

3. Bidder (Firm): \_\_\_\_\_

Address: \_\_\_\_\_

City/State: \_\_\_\_\_

4. Telephone Number: \_\_\_\_\_

5. Agent of Bidder (if Applicable): \_\_\_\_\_

Pursuant to notices given, the undersigned offers to furnish labor and/or material necessary to complete the public works project of City of Franklin, Indiana

(Governmental Unit) in accordance with plans and specifications prepared by First Group Engineering, 5925 Lakeside Blvd, Indianapolis, IN 46278 and dated April 20, 2015 for the sum of

\_\_\_\_\_ \$ \_\_\_\_\_

The undersigned further agrees to furnish a bond or certified check with this bid for an amount specified in the notice of the letting. If alternative bids apply, the undersigned submits a proposal for each in accordance with the notice. Any addendums attached will be specifically referenced at the applicable page.

If additional units of material included in the contract are needed, the cost of units must be the same as that shown in the original contract if accepted by the Governmental Unit. If the bid is to be awarded on a unit basis, the itemization of the units shall be shown on a separate attachment.

The Contractor and his subcontractors, if any, shall not discriminate against or intimidate any employee, or applicant for employment, to be employed in the performance of this contract, with respect to any matter directly or indirectly related to employment because of race, religion, color, sex, national origin or ancestry. Breach of this covenant may be regarded as a material breach of the contract.

### CERTIFICATION OF USE OF UNITED STATES STEEL PRODUCTS (If applicable)

I, the undersigned bidder or agent as a contractor on a public works project, understand my statutory obligation to use steel products made in the United States. I.C. 5-16-8-2. I hereby certify that I and all subcontractors employed by me for this project will use U.S. steel products on this project if awarded. I understand that violations hereunder may result in forfeiture of contractual payments.

ACCEPTANCE

The above bid is accepted this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, subject to the following conditions: \_\_\_\_\_

Contracting Authority Members:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

PART II

(Complete sections I, II, III, and IV for all state and local public works projects as required by statutes if project is one hundred thousand dollars (\$100,000) or more. (IC 36-1-12-4)

Governmental Unit: City of Franklin, Indiana

Bidder (Firm): \_\_\_\_\_

Date: \_\_\_\_\_

These statements to be submitted under oath by each bidder with and as a part of his bid. Attach additional pages for each section as needed.

SECTION I EXPERIENCE QUESTIONNAIRE

- 1. What public works projects has your organization completed for the period of one (1) year prior to the date of the current bid?

Contract Amount	Class of Work	When Completed	Name and Address of Owner

- 2. What public works projects are now in process of construction by your organization?

Contract Amount	Class of Work	When to be Completed	Name and Address of Owner

3. Have you ever failed to complete any work awarded to you? \_\_\_\_\_ If so, where and why?

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4. List references from private firms for which you have performed work.

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SECTION II PLAN AND EQUIPMENT QUESTIONNAIRE

1. Explain your plan or layout for performing proposed work. (Examples could include a narrative of when you could begin work, completed the project, number of workers, etc. and any other information which you believe would enable the governmental unit to consider your bid.)

2. If you intend to sublet any portion of the work, state the name and address of each subcontractor, equipment to be used by the subcontractor, and whether you expect to require a bond. However, if you are unable to currently provide a listing, please understand a listing must be provided prior to contract approval.

3. What equipment do you have available to use for the proposed project? Any equipment to be used by subcontractors may also be required to be listed by the governmental unit.

4. Have you entered into contracts or received offers for all materials which substantiate the prices used in preparing your proposal? Otherwise, please explain the rationale used which would corroborate the prices listed.

SECTION III CONTRACTOR'S FINANCIAL STATEMENT

Attachment of bidder's financial statement is mandatory. Any bid submitted without said financial statement as required by statute shall thereby be rendered invalid. The financial statement provided hereunder to the governing body awarding the contract must be specific enough in detail so that said governing body can make a proper determination of the bidder's capability for completing the project if awarded.

SECTION IV OATH AND AFFIRMATION

I hereby affirm under the penalties of perjury that the facts and information contained in the foregoing bid for public works are true and correct to the best of my knowledge and belief.

Dated at \_\_\_\_\_ this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_

\_\_\_\_\_  
(Name of Organization)

By: \_\_\_\_\_

\_\_\_\_\_  
(Title of Person Signing)

ACKNOWLEDGEMENT

STATE OF: \_\_\_\_\_ )

COUNTY OF \_\_\_\_\_ )

\_\_\_\_\_ being duly sworn, deposes and says that he is

\_\_\_\_\_ of the above \_\_\_\_\_  
(Title) (Name of Organization)

and that the answers to the questions in the foregoing questionnaires and all statements therein contained are true and correct.

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_

\_\_\_\_\_  
(Notary Public)

My Commission Expires: \_\_\_\_\_

County of Residence: \_\_\_\_\_



**2015 MAINTENANCE IMPROVEMENT PROGRAM  
HMA Patching, Milling and Resurfacing  
CITY OF FRANKLIN, INDIANA**

**NOTICE OF AWARD**

To:

Project Description: The work shall consist of, but not limited to, maintenance of traffic, cleaning of the project areas, placement of HMA Sealant such as Reclamite or approved substitute, and all other work necessary to provide for a complete project and as included in the Construction Schedule and Specifications for the 2015 Maintenance Improvement Program, HMA Patching, Milling and Resurfacing.

The Owner has considered the Proposal submitted by you for the above described Work in response to the Town's request and Instructions to Bidders.

It is the intent of the Owner to accept your proposal and enter into a contract for the items listed in the Proposal in the amount of \_\_\_\_\_ (\$ \_\_\_\_\_).

You are required by the Instructions to Bidders to execute the Contract Agreement and furnish the required Performance, Maintenance and Payment Bond within seven (7) calendar days from the date of this Notice to you.

If you fail to execute said Contract Agreement and to furnish said Bonds within fifteen (15) calendar days from the date of this Notice, said Owner will be entitled to consider all your rights arising out of the Owner's acceptance of your Proposal as abandoned. The Owner will be entitled to such other rights as may be granted by law.

You are required to return an acknowledged copy of this NOTICE OF AWARD to the Owner.

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 2015.

CITY OF FRANKLIN, INDIANA  
OWNER

By: \_\_\_\_\_

Title: \_\_\_\_\_

**ACCEPTANCE OF NOTICE**

Receipt of the above NOTICE OF AWARD is hereby acknowledged by \_\_\_\_\_

this \_\_\_\_\_ day of \_\_\_\_\_, 2015.

By: \_\_\_\_\_

Title: \_\_\_\_\_



**2015 MAINTENANCE IMPROVEMENT PROGRAM**  
**HMA Patching, Milling and Resurfacing**  
**CITY OF FRANKLIN, INDIANA**

**PERFORMANCE, MAINTENANCE AND PAYMENT BOND**

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

KNOW ALL MEN BY THESE PRESENTS THAT WE, \_\_\_\_\_ "Principal", and \_\_\_\_\_, of \_\_\_\_\_, State of \_\_\_\_\_, hereinafter called the "Surety" are held and firmly bound unto the City of Franklin, Indiana, hereinafter called "Owner", and unto all persons, firms, and corporations who may furnish materials for, or perform labor upon the structure or improvements hereinafter referred to in the penal sum of \_\_\_\_\_ (\$ \_\_\_\_\_) in lawful money of the United States of America, to be paid in Johnson County, Indiana, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, forever firmly by these presents.

THE CONDITION OF THE ABOVE OBLIGATION, HOWEVER, IS SUCH THAT:

WHEREAS, the Principal enters into a certain agreement with the City of Franklin, Indiana, the Owner, dated the \_\_\_\_\_ day of \_\_\_\_\_, A.D. 2015, a copy of which is hereto attached and made a part hereof for the \_\_\_\_\_ project.

NOW, THEREFORE, if the said Principal shall well and truly perform and complete said project in strict accordance with said Agreement, Information for Bidders, Proposal Plans and Specifications, and related documents, shall pay as they become due all just claims for work or labor performed including the faithful performance of the prevailing hourly wage as set forth in this Contract and also materials furnished in connection with said Agreement, including all amounts due for materials, lubricants, oil, gasoline, seed, hay, food, coal and coke, repairs on machinery, groceries and food stuffs, equipment and tools, consumed or used in connection with the construction of such work, and all insurance premiums, both compensation and all other kinds of insurance, on said work, and for all labor, performed in such work whether by subcontractor or otherwise, and shall defend, indemnify and save harmless said Owner against any and all liens, encumbrances, damages, claims, demands, expenses, costs, and charges of every kind, including patent infringement claims except as otherwise provided in said Specifications and other Contract Documents arising out of or in relation to the performance of said work and the provisions of said Agreement, including the general guaranty for the one (1) year following substantial completion of the work, then these presents shall be void; otherwise they shall remain in full force and effect. This obligation is made for the use of said Owner and also for the use and benefit of all persons who may perform any work or labor or furnish any material in the execution of said Agreement and may be sued on thereby in the name of the Owner. Any conditions legally required to be included on a payment bond on this contract are included herein by reference.

PROVIDED, FURTHER, that if any legal action be filed upon this bond, venue shall lie in Johnson County, State of Indiana, and that the said Surety, for value received hereby stipulated and agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the work to be performed thereunder or the Specifications accompanying the same shall in any wise affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the work or to the Specifications.

PROVIDED FURTHER, that no final settlement between the Owner and the Contractor shall abridge the right of any beneficiary hereunder whose claim may be satisfied.

PROVIDED FURTHER, that the performance of the materials and completed work shall be guaranteed by the Contractor for a period of one year from the date of final acceptance. The warranty shall be guaranteed by submission of a one-year maintenance bond with a guarantee in a numeric amount equal to twenty percent of the final contract amount. This maintenance bond shall be submitted prior to release of final payment for this contract.

IN TESTIMONY WHEREOF, this instrument is executed in three (3) counterparts, each one of which shall be deemed an original, this \_\_\_\_\_ day of \_\_\_\_\_, 2015.

ATTEST:

\_\_\_\_\_  
Principal Secretary

(SEAL)

\_\_\_\_\_

ATTEST:

\_\_\_\_\_  
Surety Secretary

\_\_\_\_\_  
Witness as to Surety

\_\_\_\_\_  
PRINCIPAL

By: \_\_\_\_\_

Title: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_  
Address

\_\_\_\_\_  
SURETY

By: \_\_\_\_\_

Attorney-in-Fact

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_  
Address

NOTE: Date of bond must not be prior to date of Contract. If Contractor is partnership, all partners should execute bond.

IMPORTANT: Surety companies executing bond must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where the project is located.

**CITY OF FRANKLIN, INDIANA**

By: \_\_\_\_\_

\_\_\_\_\_  
(Office or Position of Signer)

**2015 MAINTENANCE IMPROVEMENT PROGRAM**

**HMA Patching, Milling and Resurfacing**

**CITY OF FRANKLIN, INDIANA**

**CONTRACT AGREEMENT**

THIS AGREEMENT, made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 2015, by and between the **City of Franklin**, Party of the First Part, hereinafter referred to as the "Owner", and \_\_\_\_\_ Party of the Second Part, hereinafter referred to as the "Contractor" for the **2015 MAINTENANCE IMPROVEMENT PROGRAM, HMA PATCHING, MILLING AND RESURFACING.**

WITNESSETH:

ARTICLE 1. It is hereby mutually agreed that for and in consideration of the payments as provided for herein to the Contractor by the Owner, the said Contractor shall furnish all labor, equipment, and material and shall perform all work necessary to complete the improvements in a good and substantial manner, ready for use, and in strict accordance with this Contract, a copy of which is filed pursuant to law in the office of the Town Hall.

ARTICLE 2. It is hereby further agreed that in consideration of the faithful performance of the work by the Contractor, the Owner shall pay the Contractor the compensation due him by reason of said faithful performance of the work, at stated intervals and in the amount certified by the Engineer, in accordance with the provisions of this Contract.

ARTICLE 3. It is hereby further agreed that, at the completion of the work and its acceptance by the Owner, all sums due the Contractor by reason of his faithful performance of the work, taking into consideration additions to or deductions from the Contract price by reason of alterations or modifications of the original Contract or by reason of "Extra Work" authorized under this Contract, will be paid the Contractor by the Owner after said completion and acceptance.

ARTICLE 4. It is hereby further agreed that any reference herein to the "Contract" shall include all "Contract Documents" as the same are listed and described in GENERAL CONDITIONS, bound herein, and said "Contract Documents" are hereby made a part of this Agreement as fully as if set out at length herein, and that this Contract is limited to the items in the Proposal as signed by the "Contractor" and included in the "Contract Documents".

ARTICLE 5. The Contractor agrees to perform all of the work described in the Contract Documents for the unit prices and lump sums as submitted in the Bid, taking into consideration additions to or deductions from the Total Bid by reason of alterations or modifications of the original quantities or by reason of "Extra Work" authorized under this Agreement in accordance with the provisions of the Contract Documents.

ARTICLE 6. The Contractor agrees to warranty all of the work described in the Contract Documents for a period of one year after the date of final acceptance. The warranty shall be guaranteed by submission of a one-year maintenance bond a numeric amount equal to twenty percent of the final contract amount. This maintenance bond shall be submitted prior to release of final payment for this contract.

ARTICLE 7. It is hereby further agreed that a retainage equal to 5% of the Contractor's bid will be held by the Owner until the Owner approves all work performed for this Contract and releases the Contractor from this contract.

IN WITNESS WHEREOF, the Party of the First Part and the Party of the Second Part, respectively, have caused this Agreement to be duly executed in day and year first herein written in three (3) copies, all of which to all intents and purposes shall be considered as the original.

ARBITRATION PROVISION: THIS CONTRACT CONTAINS A BINDING PROVISION WHICH MAY BE ENFORCED BY THE PARTIES.

**CONTRACTOR, PARTY OF THE SECOND PART**

\_\_\_\_\_

By: \_\_\_\_\_

\_\_\_\_\_  
(Office or Position of Signer)

**OWNER, PARTY OF THE FIRST PART  
CITY OF FRANKLIN**

By: \_\_\_\_\_

\_\_\_\_\_  
(Office or Position of Signer)

(SEAL)

ATTEST:

\_\_\_\_\_

**2015 MAINTENANCE IMPROVEMENT PROGRAM  
HMA Patching, Milling and Resurfacing  
CITY OF FRANKLIN, INDIANA**

**NOTICE TO PROCEED**

To:

Date: \_\_\_\_\_, 2015

Project Description: The work shall consist of, but not limited to pavement removal, exaction, milling, compaction, undercutting, placement of compacted aggregate, HMA Base and HMA surface as well as cleaning of the project areas, placement of pavement marking that match preexisting conditions and all other work necessary to provide for a complete project and as included in the Construction Schedule and Specifications for the 2015 Maintenance Improvement Program, HMA Patching, Milling and Resurfacing.

You are hereby notified to commence work in accordance with the Contract Agreement dated \_\_\_\_\_, 2015 and you are to complete the work within **the time allocated in the Technical Specifications in this contract book.**

**City of Franklin**

By:

Date:

**ACCEPTANCE OF NOTICE**

Receipt of the above NOTICE TO PROCEED is hereby acknowledged by

\_\_\_\_\_

this \_\_\_\_\_ day of \_\_\_\_\_, 2015.

By: \_\_\_\_\_

Title: \_\_\_\_\_

**2015 MAINTENANCE IMPROVEMENT PROGRAM  
HMA Patching, Milling and Resurfacing  
CITY OF FRANKLIN, INDIANA**

**CONTRACTOR'S PROGRESS ESTIMATE**

Contractor:	Date:
Address:	Estimate
Owner: City of Franklin, Indiana	Work Started:
Project: 2015 Maintenance Improvement Program, HMA Patching, Milling and Resurfacing	Work to be Completed:

We submit herewith Estimate Number \_\_\_ under contract for the above-named project. A detailed account of the work completed and a record of the materials on site or in an approved storage is attached hereto.

STATEMENT OF ACCOUNT

Original Contract Amount		\$ _____
Contract Revisions:		
(Through change order )	.....	\$ _____
Amount of Contract Revisions:		\$ _____
New Contract Amount		\$ _____
Value of Work Performed to Date	\$	
Value of Materials on Hand	\$	
Total Value of Work and Materials		\$ _____
Less Previous Due Amount	\$	
Less Previous Retainage Amount	\$	
Total of Previous Requests		\$ _____
Amount of this Request		\$ _____
Less Amount to Be Retained		\$ _____
Amount of Previous Retainage to Be Released		\$ _____
<b>BALANCE DUE CONTRACTOR</b>		<b>\$ _____</b>

**2015 MAINTENANCE IMPROVEMENT PROGRAM  
HMA Patching, Milling and Resurfacing  
CITY OF FRANKLIN, INDIANA**

**CHANGE ORDER**

Contractor:  
Address:

Date:

Change Order No.

Owner: City of Franklin, Indiana  
Project: 2015 Maintenance Improvement Program, HMA  
Patching, Milling and Resurfacing.  
We submit herewith Change Order Number (\_\_\_\_\_) under contract for the above-named project.

Description of Change:

Bid Item No.	Description	Previous Quantity & Unit	Revised Quantity & Unit	Quantity Increase or (-) Decrease	Unit Price	Cost (+) Increase or (-) Decrease
<b>TOTAL</b>						

Increase by:   \$                   or Decrease by:   \$                   the Total Contract Amount.

Revise the Contract Amount as Follows:

Original Contract Amount: .....  
Revisions through Change Order No. :.....  
Previous Revised Contract Amount: .....  
Revision by this Change Order No. :.....  
Revised Contract Amount: .....

Receipt of this Change Order fully executed a Notice To Proceed with the work described herein and all requirements of the Contract Documents shall apply to the performance of the work.

This Change Order is for full and final settlement of all direct, indirect, impact costs and time extensions incurred at any time resulting from the performance of the changed work.

**ENGINEER SUBMITTED:**

FIRST GROUP ENGINEERING, INC.

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**ATTEST:**

\_\_\_\_\_

Date: \_\_\_\_\_

**CONTRACTOR CONFIRMED:**

\_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**OWNER APPROVED:**

CITY OF FRANKLIN, INDIANA

By: \_\_\_\_\_

Title: \_\_\_\_\_

**2015 MAINTENANCE IMPROVEMENT PROGRAM**  
**HMA Patching, Milling and Resurfacing**  
**CITY OF FRANKLIN, INDIANA**

**INSURANCE REQUIREMENTS**

**CONTRACTOR INDEMNIFICATION**

The Work performed by the Contractor shall be at the risk of that Contractor exclusively. To the fullest extent permitted by law, Contractor shall indemnify, defend (at their sole expense) and hold harmless the City of Franklin and their employees ("Indemnified Parties"), from and against any and all claims for bodily injury, death or damage to property, demands, damages, actions, causes of action, suits, losses, judgments, obligations and any liabilities, costs and expenses (including but not limited to investigative and repair costs, attorneys' fees and costs, and consultants' fees and costs) ("Claims") which arise or are in any way connected with the Work performed, Materials furnished, or Services provided under this Agreement by the Contractor or its agents. These indemnity and defense obligations shall apply to any acts or omissions, negligent or willful misconduct of the Contractor, its employees or agents, whether active or passive. The Contractor's indemnification and defense obligations hereunder shall extend to Claims occurring after this Agreement is terminated as well as while it is in force, and shall continue until it is finally adjudicated.

**INSURANCE REQUIREMENTS**

Upon execution of this Agreement, and prior to the Contractor commencing any work or services, the Contractor shall provide the City of Franklin with a Certificate of insurance as evidence of Commercial General Liability insurance, Workers' Compensation and Automobile Liability for any employees, agents, or Subcontractors of the Contractor.

The Contractor's liability coverage shall use ISO form CG 00 01 10 01 (or equivalent coverage) and include the City of Franklin as an Additional Insured using ISO Form CG 20 10 11 85 (or equivalent coverage) or on the combination of ISO Forms CG 20 10 10 01 and CG 20 37 10 01 (or equivalent coverage). This Additional Insured coverage shall apply as primary & non-contributory insurance with respect to any other insurance afforded to the City of Franklin. Such insurance shall cover liability arising from premises, operations, independent contractors, products-completed operations, personal and advertising injury, and liability assumed under an insured contract (including the tort liability of another assumed in a business contract). There shall be no endorsement or modification of the Commercial General Liability form arising from explosion, collapse, underground property damage or work performed by subcontractors.

The coverage limits shall not be less than the following:

Commercial General Liability Insurance:

- \$1,000,000 Each Occurrence
- \$2,000,000 General Aggregate
- \$2,000,000 Products/Completed Operations Aggregate
- \$1,000,000 Personal and Advertising Injury

Workers' Compensation and Employers' Liability Insurance:

- \$500,000 Bodily Injury by Accident
- \$500,000 Bodily Injury by Disease- Policy Limit
- \$500,000 Bodily Injury by Disease - Each Employee

Automobile Liability Insurance:

- \$1,000,000 Each Accident

Railroad Insurance

- \$1,000,000 Each Accident

Commercial Umbrella Liability:

- \$1,000,000 Each Occurrence
- \$1,000,000 Aggregate

All coverage shall be placed with an insurance company duly admitted in the State of Indiana and have an AM Best rating of "A-" or better. Each Certificate of Insurance shall provide that the insurer must give the City of Franklin at least 30 days' prior written notice of cancellation and termination of the Contractor's coverage.



# **APPENDIX**

Technical Specifications (TS 1-8)  
Work Summary Tables (Table 1-4)

## **YEAR 2015 MAINTENANCE IMPROVEMENT PROGRAM, HMA PATCHING, MILLING AND RESURFACING**

City of Franklin Overall Mill, Patch, and Overlay Map  
Roadway Typical and Alley Reconstruction Location Maps (1-38)  
Street Mill and Overlay Plan Maps (39-68)

**2015 MAINTENANCE IMPROVEMENT PROGRAM**  
**HMA Patching, Milling and Resurfacing**  
City of Franklin, Indiana  
**TECHNICAL SPECIFICATIONS**

**TS – 1 GOVERNING DOCUMENTS**

All applicable portions of the Indiana Department of Transportation Standard Specifications, 2015, Section 200 through 900, Standard Drawings, and Supplemental Specifications for Section 200 through 900 shall apply to these Contract Documents to the extent not in conflict with the terms herein. Where the word “Standard Specifications” along with the reference consisting of a number or number and letter are used, they shall be construed as referring to the INDOT Department of Transportation Standard Specifications, 2015, Standard Drawings, or Supplemental Specifications for Section 200 through 900, as applicable.

All applicable portions of the 2011 Indiana Manual on Uniform Traffic Control Devices (MUTCD) for Streets and Highways, shall apply to these contract documents to the extent not in conflict with the terms herein.

<http://www.in.gov/dot/div/contracts/design/mutcd/mutcd.html>

**TS – 2 MATERIAL SUBMITTALS**

HMA pavement designs for each mix to be utilized shall be submitted for approval to the Engineer at least seven (7) days prior to the anticipated installation date. Time for HMA mix design approval will not be considered for contract completion date adjustment as long as the Engineer submits his review comments within 4 days of receipt of said mix design.

Aggregate tickets from an INDOT approved source shall be furnished to the Town’s representative prior to placement of said material.

**TS – 3 ENVIRONMENTAL REQUIREMENTS**

Contractor warrants that it is a competent Contractor, and has thoroughly familiarized itself with the work that it is to perform, the manner in which it has determined to perform the work and the materials and equipment it has determined to use in performing the work. Contractor further warrants that it has familiarized itself with the environmental and health laws (federal and state) and regulations (federal and state and including, but not limited to, regulations issued or promulgated by the Environmental Protection Agency and the Indiana Department of Environmental Management) applicable to the work to be performed, the manner in which Contractor intends to perform it and the materials and equipment Contractor intends to use in performing the work.

To the extent that either the work which the Contractor is to perform, the manner in which Contractor determined to perform the work or the equipment or materials used (or to be used) by the Contractor in performing the work are the subject of laws (federal or state) or regulations (federal or state, and including, but not limited to, regulations promulgated or issued by the Environmental Protection Agency or the Indiana Department of Environmental Management) requiring compliance by the Contractor or its Subcontractors, Contractor agrees to administer and comply with the applicable laws and regulations.

**COMPLIANCE AFFIDAVIT:**

Each application for payment shall be accompanied by an affidavit, signed and dated by Contractor, substantially as follows:

**2015 MAINTENANCE IMPROVEMENT PROGRAM**  
**HMA Patching, Milling and Resurfacing**  
City of Franklin, Indiana  
**TECHNICAL SPECIFICATIONS**

This is to certify that in the performance of this Contract, neither the undersigned Contractor, nor (so far as the undersigned has knowledge) any of its Subcontractors has violated any environmental or health laws, regulations or ordinances. This is to further certify that in the performance of this Contract, neither the undersigned Contractor, nor (as far as the undersigned has knowledge) any of its Subcontractors has violated any environmental or health permits applicable to the work.

**TS – 4 CORRECTION OF WORK**

*Correction of Work Before Substantial Completion:* The Contractor shall promptly remove from the premises all work condemned by the Town as failing to conform to the Contract, whether incorporated or not, whether placed in use or not, and the Contractor shall promptly replace and re-execute its own work in accordance with the Contract and without expense to the Owner and shall bear the expense of making good all existing work destroyed or damaged by such removal or replacement.

*Correction of Work After Substantial Completion:* The Contractor shall remedy any defects due to faulty materials or workmanship and repair to Town satisfaction or pay for any damage to other work resulting therefrom, which shall appear within a period of one year from the date of Substantial Completion as defined in these General Conditions, and in accordance with the terms of any special guarantees provided in the Contract. The Town shall give notice of observed defects with reasonable promptness. All questions arising under this Section shall be decided by the Town notwithstanding final payment.

**TS – 5 MAINTENANCE OF TRAFFIC**

Maintenance of traffic shall be provided as required to comply with the INDOT standards and specifications. INDOT Standard Drawing Series E801 and INDOT specification section 801 shall be followed to guide and maintain traffic flow around the construction zone. Payment for Maintaining Traffic is a lump sum price for all items required to comply with INDOT standards and specifications, as stated above.

Traffic shall not be allowed to traverse the newly installed speed humps until compaction is complete and the HMA material has been allowed to cool enough to prevent deformation of the speed hump.

**TS – 6 ROAD PAVING GEOTEXTILE**

This item will consist of sweeping and cleaning the existing pavement, placement of Tack Coat, and the installation of TRUPAVE Engineered Paving Mat or approved equal, as manufactured by Owens Corning (or approved equal material) per manufacturer's specifications. Any approved equal shall show proof that the material can be milled or recycled. This work shall be paid by the Square Yard (SYS) of Road Paving Geotextile placed. Tack Coat shall not be paid for separately, but shall be included in the unit price of the Road Paving Geotextile.

**TS – 7 HMA MATERIAL**

A copy of the INDOT Certified Plant Certificate for the plant(s) producing HMA mixtures for this project shall be submitted 1 week prior to the beginning of paving operations.

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**HMA Patching, Milling and Resurfacing**  
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The Contractor shall furnish all labor, material and equipment to prepare the existing road bed for paving. Each bidder shall be responsible for inspecting the project sites and verifying any measurements stated in the project specifications. Preparation shall be such that a smooth transition is obtained from newly paved areas to existing pavements. Payment for preparation will not be paid for directly, but shall be included in the price of the materials to be placed.

In the preparation of an existing asphalt or concrete pavement for paving, the Contractor shall remove dirt, gravel, sod and other debris from the existing pavement edges, followed by brooming of the pavement surface. Voids, holes or depressions deeper than one (1) inch shall be filled with an HMA mixture and compacted. Payment for HMA used to fill voids, holes or depressions will be per ton of the mixture placed.

INDOT Standard Specifications, Section 402, shall apply with the exceptions noted herein. The current version of the INDOT Specifications, Recurring Special Provisions, and Supplemental Specifications are applicable. The material shall be produced from an INDOT Certified HMA Plant, in accordance with Indiana Test Method ITM -583.

Coarse aggregate shall be approved materials from an INDOT Certified Aggregate Producer (CAP) source; however, the material shall **NOT** be or contain gravel.

Mixture Type: The mixture types shall be Type A, B, C, or D as shown on the Unit Bid Sheet. HMA mixtures shall be produced in accordance with 402.04.

Density: Density for all mixture types will be controlled by 402.15.

Mixture Type	Type A	Type B	Type C	Type D
<b>Design ESAL</b>	200,000	2,000,000	9,000,000	11,000,000
<b>Surface</b>	9.5 mm	9.5 mm	9.5 mm	9.5 mm
<b>Surface – PG Binder</b>	64-22	64-22	70-22	70-22
<b>Intermediate</b>	19.0 mm	19.0 mm	19.0 mm	19.0 mm
<b>Intermediate – PG Binder</b>	64-22	64-22	64-22	70-22
<b>Base</b>	25.0 mm	25.0 mm	25.0 mm	25.0 mm
<b>Base – PG Binder</b>	64-22	64-22	64-22	64-22

\*Type C Mixtures may be substituted for Type B Mixtures.

Recycled Asphalt Pavement: (RAP): Recycled materials, up to 25%, may be used as a substitute for a portion of the new material required to produce HMA mixtures. When using greater than 10% RAP the PG Binders listed in the above table shall be changed as follows:

**PG 64-22 to PG 64-28**  
**PG 70-22 to PG 70-28**

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Acceptance of Mixtures: Acceptance shall be based on 402.09. The HMA Certification shall include the PG Binder Grade sent to the project. The attached materials certification form shall be submitted for each day mixture is delivered to the project.

Payment will be made to the Contractor for the accepted quantities of work at the contract bid price per unit. No payment for quantities in excess of those shown in the bidding documents will be made to the Contractor without prior written approval from the Engineer authorizing such additional quantities.

The Contractor shall clean up and properly dispose of any excess materials and debris resulting from the work. The cost of cleanup and disposal will not be paid for directly, but shall be included in the cost of the materials placed.

HMA surface material shall be used to construct the speed humps if speed humps are called out.

**TS – 8 FULL DEPTH HMA PATCHING**

This item will consist of areas within the existing pavement and shall include saw-cutting the existing pavement, removal of existing pavement section and unstable subgrade material and installation of HMA material from subgrade elevation to flush with the existing pavement. The new HMA surface shall match the existing surface grade. All patch area interfaces shall receive an application of Tack Coat. Pavement section shall be 17” thick for Arterial Streets and shall be Type C HMA:

- 1.5” of 9.5 mm Surface on
- 2.5” of 19.0 mm Intermediate on
- 3” of 25.0 mm HMA Base on
- 12” of Compacted Aggregate No. 53, Base

Pavement section shall be 13” thick for Collector Streets and shall be Type C HMA:

- 1.5” of 9.5mm HMA Surface on
- 2.5” 19.0mm HMA Intermediate on
- 3” 25.0mm HMA Base on
- 6” Compacted Aggregate, No. 53, Base

Pavement section shall be 10” thick for Local Streets and shall be Type C HMA:

- 1.5” 9.5mm HMA Surface on
- 3.5” 25.0 mm HMA Intermediate on
- 6” Compacted Aggregate, No. 53, Base

Payment will be by the ton for Full Depth HMA Patching. All associated work to complete the patch including saw-cutting the existing pavement, removal of existing pavement, tack coat, and removal of any unstable subgrade material shall be included in the cost of Full Depth HMA Patching. The final grade of the patch shall ensure positive drainage off of the roadway surface.

**TS – 9 HMA SURFACE**

This item will consist of cleaning existing pavement surfaces; application of tack coat and installation of a HMA, type and thickness as specified elsewhere in the documents. The paver shall be operated (except in subdivisions) utilizing automatic slope and grade controls. The grade leveler device shall be connected to a “ski” assembly. Variances due to inconsistencies in existing pavement will be allowed for constructability. Areas to be overlaid with HMA Surface shall be as shown on the typical sections.

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**TS – 10 TACK COAT**

This item will consist of cleaning existing pavement surfaces and application of tack coat per INDOT Standard Specifications, Section 406. Tack Coat will not be paid for directly, but shall be included in the cost of other items.

**TS – 11 WORK HOURS**

The approved work hours for this project are from 7 AM to 8 PM, Monday through Saturday, except on government holidays. Approval for work to take place outside of the approved work hours shall be obtained from the Owner at least 3 days in advance. Work completed outside of the approved work hours, without sufficient prior notification, may be deemed “failed material”, to be removed and replaced without additional payment due to the Contractor.

**TS – 12 MILL & RESURFACING**

Mill and Resurfacing shall include the milling of the asphalt surface to approximately **the depth shown in the work tables** and the replacement of this milled surface shall be a minimum 165 lbs/SYD (1.5” Depth) HMA Surface Type C or the thickness specified in the work tables. The cost of sweeping, restriping, and all other incidental tasks necessary to prepare the roadway for Mill and Resurfacing as well as return the roadway to its original functionality shall be included in the costs of Milling Asphalt, 1.5” and HMA Surface Type C.

Milling Asphalt, 1”, 1.5”, or 4” shall be paid for per SYD, HMA Surface Type C shall be paid for per Ton.

**TS – 13 CRACK SEAL**

Crack Seal shall be placed at all paving joints created by HMA patching operations and Mill and Fill operations. The contractor shall provide and place sealant in accordance with all applicable requirements of INDOT 2015 Standard Specification Section 408 “Sealing Cracks and Joints.”

The contractor shall submit to the City of Franklin the technical data and tested physical and performance properties of the products used and all certificates signed by manufacturers certifying that each material complies with requirements laid out in INDOT 2015 Standard Specification Section 900.

The following conditions must be met to ensure the product placed is accepted for payment unless otherwise approved by the City of Franklin:

1. Environmental Limitations: Do not apply crack sealant or filler materials if substrate is wet or excessively damp or if the following conditions are not met:
  - a. Cracks must be clean and free from debris.
  - b. The minimum surface temperature of the pavement shall be equal to or greater than 50° F at time of placement.
    - i. The Town should be notified immediately if these conditions are impossible to meet in order to recalculate the project completion date.
2. Sealant - General: Use Crafcoc, Inc. Roadsaver 221 Sealant or approved equal.
3. Sealant Debonding Material – General: Use Crafcoc, Inc. Detack, or approved equal.
4. Filler Material – General: Use INDOT AE-90 or approved equal.

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5. Filler Debonding Material – General: Use INDOT No. 23 or No. 24 sand or approved equal. Application rate shall be approximately five pounds per square yard.
6. Surface Preparation - General: Immediately before placing crack sealing or filling materials, utilize compressed air to remove loose and deleterious material from surfaces. Ensure that pavement is clean, dry and ready to receive material.
7. Crack Sealant Filler Placing:
  - a. Place crack sealing or filling material in conformance to manufacturer’s requirements for quality and safety.
  - b. Place crack seal or filler in cracks and joints so that void is completely filled. If settling occurs, place additional material so that material in void is reasonably level with or slightly below adjacent materials (a slight underfill is preferred).
  - c. Material SHALL be squeegeed and the residual band shall be no greater than three inches (3”).
  - d. Where multiple cracks are in close proximity to one another, the area shall be flooded with crack seal or filler material, excess material removed by broom, squeegee, or other approved method and the area dusted with manufactured sand (limestone chips). The area is to be wheel-rolled with a light vehicle (pick-up truck is acceptable) and excess material removed by sweeping.
  - e. Place debonding agent “Detack” to hot-pour areas prior to exposing treated cracks to traffic. Place debonding agent in conformance to manufacturer’s requirements for quality and safety.
  - f. Traffic shall not be allowed on the sealant until it has cured and the possibility of tracking does not exist. The ENGINEER shall determine when this condition exists.
  - g. Crack Sealant applied in a mobile set on all streets shall have a sealant debonding material added to prevent tracking.
8. Installation Tolerances - Smoothness: Cracks shall be filled so that the cured material is flush with or slightly below the adjacent pavement. Any excess material applied shall be removed or distributed (squeegee).
9. Field Quality Control
  - a. An Owner’s representative may inspect the work. The work may be inspected for coverage, bonding of the cured material to cracks, adequate fill height and/or tracking of material.
  - b. Remove and replace or install additional crack sealant where inspection results or measurements indicate that it does not comply with specified requirements.

**TS – 14 RESTORE PAVEMENT MARKINGS**

In all locations where milling, patching or overlaying destroy the existing pavement markings, the existing pavement markings shall be returned to their existing condition using paint pavement marking materials that match the color used for all long lines and message markings for all words or arrows removed.

**TS – 15 SCHEDULE OF LIQUIDATED DAMAGES AND PROJECT STREET COMPLETION**

All alley reconstruction work as well as all work to finish the milling, patching, and resurfacing of Madison Street and King Street shall be finished prior to October 21<sup>st</sup>, 2015. All remaining work shall

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be completed by June 30, 2016. The schedule of liquidated damages and contract extension for both milestones shall be per INDOT spec 108.

**TS – 16 PCCP FOR PATCHING, HMA FOR PATCHING, AND COMPACTED AGGREGATE FOR PATCHING**

The cost of saw cutting, excavation and removal of all materials necessary to clear the pavement holes for patching shall be included in the cost of PCCP for Patching, HMA for Patching, and Compacted Aggregate for Patching and shall not be paid for as common excavation.

**TS – 17 GLASGRID**

The reinforcement mesh shall be a knitted, glass fiber strand grid with the following characteristics:

- a. Tensile strength as per ASTM D 6637  
8501 - 100 kN/m x 100 kN/m\* (560 lb/in x 560 lb/in\*\*) component strand strengths.  
8502 - 200 kN/m x 100 kN/m (1120 lb/in x 560 lb/in) component strand strengths.
- b. Area weight as per ASTM D 5261-92  
8501 - 370 g/m<sup>2</sup> (11 oz/yd<sup>2</sup>) 8502 - 560 g/m<sup>2</sup> (16 oz/yd<sup>2</sup>)
- c. Coated with a modified polymer coating
- d. Elongation at break less than 5% as per ASTM D 6637
- e. Melt point above 218°C (425°F)
- f. The mesh will be self-adhesive, with sufficient bond to allow normal construction traffic and paving machinery operations.
- g. Mesh opening 12.5 mm x 12.5 mm (1/2" x 1/2")

Prior to laying the GlasGrid® mesh, the following surface treatment shall be carried out:

- a. Perform any remedial work such as base repairs, crack sealing, pothole filling, leveling course applications, etc., that would normally occur before an asphalt course overlay, as directed by Engineer.
- b. The surface temperature before laying the grid shall be between 5°C and 60°C (40°F and 140°F).
- c. The surface shall be dry and free of dirt, swept or vacuum cleaned by a mechanical device, as well as freed of oil, vegetation and other debris.

GlasGrid mesh shall be laid out either by hand or by mechanical means under sufficient tension to eliminate ripples. Should ripples occur, these must be removed by pulling the grid tight or in extreme cases (on tight radii), by cutting and laying flat. Transverse joints must be lapped in the direction of the paver by 75-150 mm (3-6 inches). Overlap longitudinal joints 25-50 mm (1-2 inches).

The surface of the GlasGrid mesh shall be rolled with a rubber coated drum roller, or pneumatic tired roller, one or two passes being sufficient to activate the adhesive. Tires must be cleaned regularly with asphalt cleaning agent.

Construction and emergency traffic may run on GlasGrid mesh after being rolled. However, it must be ensured that damage is not caused to the grid by vehicles turning or braking etc., and that the GlasGrid mesh must be kept clean of mud, dust and other materials. Damaged sections shall be removed and patched, taking care to underlap the full roll.



**2015 MAINTENANCE IMPROVEMENT PROGRAM**  
**HMA Patching, Milling and Resurfacing**  
**City of Franklin, Indiana**  
**TECHNICAL SPECIFICATIONS**

All GlasGrid mesh placed in a day shall be covered with asphalt concrete the same day, within permissible laying temperatures to a minimum compacted thickness of 40 mm (1.5 inches).

GlasGrid mesh must be stored in dry covered conditions free from dust and stocked vertically to avoid misshaped rolls.

GlasGrid mesh must be laid and rolled over ironworks or other obstructions before cutting around the perimeter of the obstructions. Cutting is achieved by using a sharp utility knife.

A representative of the manufacturer must be present during installation of this material and all work must be carried out in accordance with the manufacturer's specification.

Please consult your technical representative if any changes are required.

- \* All metric values are nominal.
- \*\* All imperial values are approximate.

**TS – 18 PCCP FOR PATCHING**

All existing PCCP that is marked for patching in the plan documents shall first be removed and disposed of and the cost of these operations shall be included in the cost of PCCP for Patching. PCCP for patching shall be 8" thick placed on a subgrade compacted by a hand vibratory compactor. Subgrade shall be inspected by the City prior to placement of PCCP for Patching. All PCCP for patching shall be crack filled around the edges with that paid for as Crack Seal.

END OF SECTION

Name	Measured Area (SYS)	HMA Removal CYS	HMA Surface, Tons	Compacted		Manhole, Adjust to Grade	Concrete Patch, Remove	Ditch Grading Ft	Concrete Curb, 6" FT
				Aggregate For UnderCut #53	Aggregate, No. 53				
Alley 1A	129	35	21	4	42				
Alley 2A	426	115	70	14	140				
Alley 3A	322	87	57	11	106				317
Aley 3B	282	76	47	9	92				
Alley 4A	345	93	57	11	113				
Alley 5A	301	82	50	10	99				
Alley 6B	434	118	72	14	142	0	1		
Alley 7A	363	98	60	12	119	0		30	
Alley 8B	287	78	47	9	94	1			
Alley 9A	293	79	48	10	96	2	1		
Alley 10B	290	79	48	10	95	1			
Alley 11B	256	69	42	8	84	2			
Alley 12B	146	40	24	5	48	1			
Alley 13B	335	91	55	11	110	1			86
Alley 14A	304	82	50	10	100				
Alley 14B	279	76	46	9	91	1	1		
Alley 15B	530	144	87	17	174	1			
Alley 16B	377	102	62	12	124	3			
Alley 17B	179	48	30	6	59				
Alley 18B	335	91	55	11	110		1		
Alley 19A	389	105	64	13	128				
Alley 19B	268	73	44	9	88	1			
Alley 20A	327	89	54	11	107				
Alley 20B	280	76	46	9	92	1			
Alley 21B	316	86	52	10	104	1			
Alley 22A	152	41	25	5	50				
Alley 22B	335	91	55	11	110				
Alley 23A	161	44	27	5	53				
Alley 24B	970	263	160	32	318	1			
Alley 24C	260	70	43	9	85				

Table 1 - Alley Quantities

Name	Measured Area (SYS)	HMA Removal CYS	HMA Surface, Tons	Compacted		Manhole, Adjust to Grade	Concrete Patch, Remove	Ditch Grading Ft	Concrete Curb, 6" FT
				Aggregate For UnderCut #53	Backfill, No. 53				
Alley 24D	265	72	44	9	87				
Alley 25A	339	92	56	11	111				
Alley 25B	364	99	60	12	119	1			
Alley 26A	470	127	78	15	154	1			
Alley 26B	221	60	36	7	72				
Alley 27B	235	64	39	8	77	1			
Alley 28B	81	22	13	3	27				
Alley 29B	251	68	41	8	82	1			
Alley 30A	205	56	34	7	67				
Alley 30B	223	60	37	7	73				
Alley 31B	254	69	42	8	83				
Alley 32B	136	37	22	4	45				
Alley 33A	164	44	27	5	54				
Alley 34B	321	87	53	11	105				
Alley 35A	344	93	57	11	113				
Alley35B	421	114	69	14	138				
Alley 36B	165	45	27	5	54				
Alley 37B	274	74	45	9	90				
<b>Total</b>	<b>14404</b>	<b>3901</b>	<b>2380</b>	<b>472</b>	<b>4722</b>	<b>21</b>	<b>4</b>	<b>30</b>	<b>403</b>

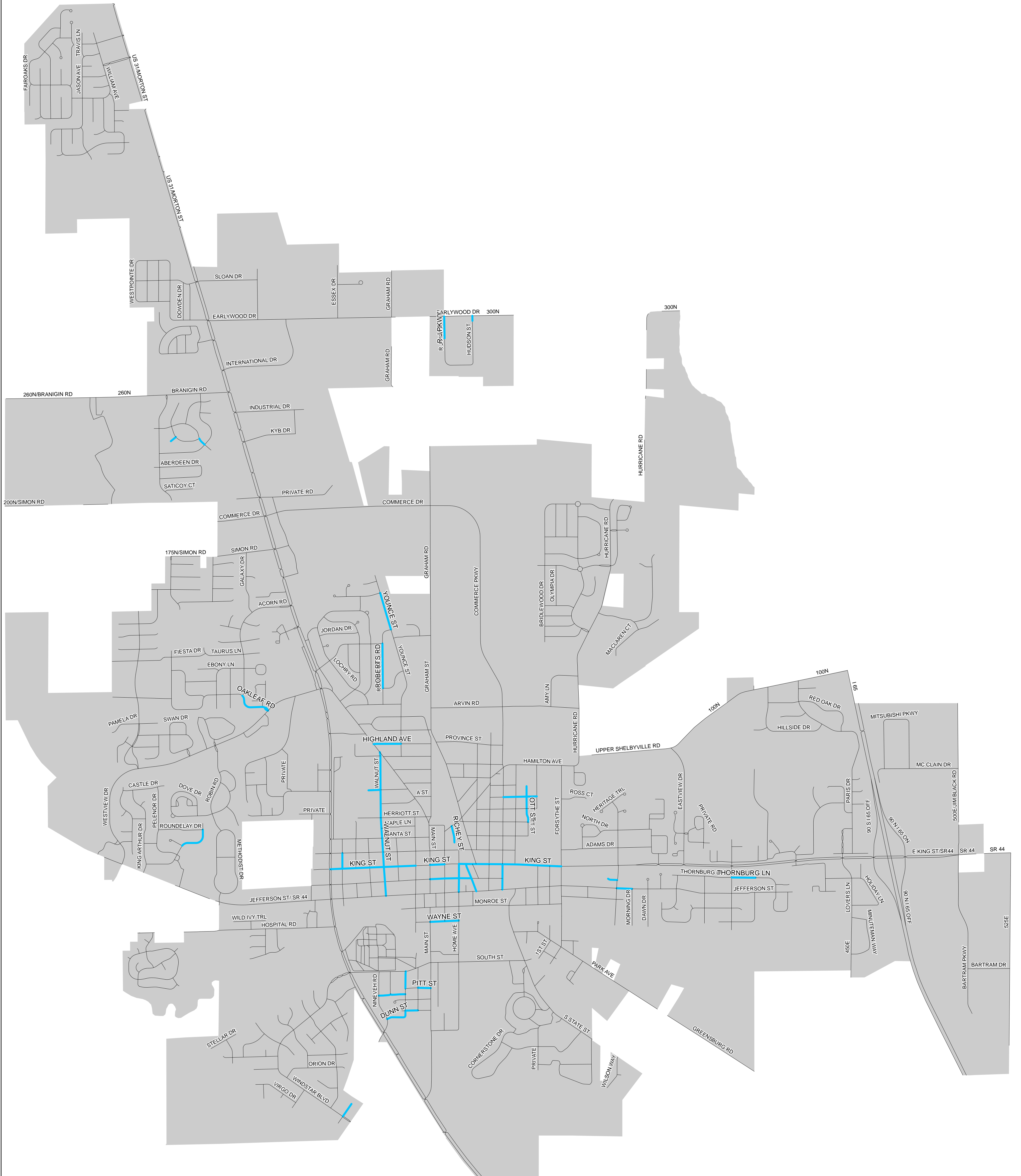
Table 2 - Alley Quantities

OBJECT D	COMBINED WITH OBJECT ID	Street Class.	Name	Page No.	Length (ft)	WIDTH (ft)	CAD Measured Milling Area (SYS)	Field Marked HMA Patching Area (SYS)	Comp. Agg. #53 for Patching Base (Tons)	HMA for Patching, Type C (Tons)	HMA Surface (Tons)	PCCP Patching Area (SYS)	Crack Seal (ft)	Glassgrid (SYS)	NOTE
6941		Local	CAPRICORN DR	50	387	24	1567	91	29.9	17.5	129.3				patch_overlay
7594		Local	CENTRAL AVE	52	306	22	679	52	17.1	10.1	56.0				patch_overlay
7252		Local	CREEKSTONE CT	58	166	24	983	21	6.9	4.1	81.1				patch_overlay
6516	7187	Local	CROWELL ST	39	389	24		40	13.1	7.7	0.0				patch_overlay
7187		Local	CROWELL ST	39	352	27	2120	89	29.2	17.2	174.9				patch_overlay
6978		Local	DUNN ST	48	439	20	1154	30	9.7	5.7	95.2				patch_overlay
7003		Local	DUNN ST	49	622	12	1060	182	59.7	35.0	87.5				patch_overlay
7413		Local	FIELDING LN	58	206	24	461	28	9.1	5.3	38.0				patch_overlay
6338		Local	FOREST PARK DR	46	239	19	769	64	21.1	12.4	63.4				patch_overlay
6717	6761	Local	FRANKS PL	49	372	12			0.0	0.0	0.0				patch_overlay
6761		Local	FRANKS PL	49	309	13	901	5	1.6	1.0	74.3				patch_overlay
7276		Local	HIGHLAND AVE	60	391	24	1171	44	14.4	8.5	96.6				patch_overlay
7819	7276	Local	HIGHLAND AVE	60	306	23			0.0	0.0	0.0				patch_overlay
6644		Local	HILLSIDE DR	61,62	1512	24			0.0	0.0	0.0	179	274		PCCP PATCHES
6397	6575	Collector	HOME AVE	39	363	24			0.0	0.0	0.0				patch_overlay
6575		Collector	HOME AVE	39	350	29	2347	35	11.5	10.6	193.6				patch_overlay
7829		Local	HUDSON ST	59	128	24	230	230	75.3	44.2	19.0				patch_overlay
6435		Arterial	HURRICANE ST	40	284	24	1662		0.0	0.0	137.1				patch_overlay
6539	6435	Arterial	HURRICANE ST	40	360	24			0.0	0.0	0.0				patch_overlay
6770		Arterial	JEFFERSON ST	46	393	21	689	122	80.1	43.7	56.8				Overlay -Patch 1 Block Down
6313		Collector	KING ST	39	182	24	676	103	33.9	31.3	55.8				patch_overlay
6618		Collector	KING ST	38	373	26	683	87	28.4	26.2	56.3				patch_overlay
7239		Collector	KING ST	45	1197	24	4073		0.0	0.0	336.0				mill_overlay
7315	7478	Collector	KING ST	37	449	28			0.0	0.0	0.0				patch_overlay
7370	7799	Collector	KING ST	35	153	28		160	52.4	48.4	0.0				patch_overlay
7477	7799	Collector	KING ST	36	360	28		38	12.5	11.5	0.0				patch_overlay
7478		Collector	KING ST	37	363	28	2199		0.0	0.0	181.4				patch_overlay
7715	7799	Collector	KING ST	36	352	28		30	9.9	9.1	0.0				patch_overlay
7799	7799	Collector	KING ST	35	169	28	3694	18	5.8	5.4	304.8				patch_overlay
6393		Local	LANCELOT DR	57	648	28	3199		0.0	0.0	263.9			3199	patch_overlay
7814	6393	Local	LANCELOT DR	57	163	28			0.0	0.0	0.0				patch_overlay
6374		Collector	MADISON ST	38	363	30	869		0.0	0.0	71.7				patch_overlay
6436	6374	Collector	MADISON ST	38	372	30	641		0.0	0.0	52.9				patch_overlay
6576		Collector	MADISON ST	39	317	30	796		0.0	0.0	65.7				patch_overlay
6949		Local	OAKLEAF RD	63	115	19	4097	66	21.7	12.7	338.0				mill_overlay
6346	6949	Local	OAKLEAF RD	63	115	24			0.0	0.0	0.0				mill_overlay
7551	6949	Local	OAKLEAF RD	63	69	43			0.0	0.0	0.0				mill_overlay
7744	6949	Local	OAKLEAF RD	63	359	24			0.0	0.0	0.0				mill_overlay
7745	6949	Local	OAKLEAF RD	63	347	24		113	36.9	21.7	0.0				mill_overlay
6403		Local	OTT ST	43	264	16	420		0.0	0.0	34.7				patch_overlay
6451	6481	Local	OTT ST	43	304	15	486	196	64.1	37.6	40.1				patch_overlay
6481		Local	OTT ST	44	349	15	621	39	12.8	7.5	51.2				patch_overlay
6887		Local	PARIS DR	64	325	24			0.0	0.0	0.0	115	219		PCCP PATCHES
6734		Local	PITT ST	48	325	24	638		0.0	0.0	52.6				patch_overlay
7826		Collector	R J PKWY	59	556	26	1438	416	136.4	125.8	118.6				patch_overlay
6339		Local	RICHEY ST	41	423	13	976	37	12.0	7.1	80.5				patch_overlay
6389		Local	RIDGE ST	49	318	17	541	42	13.7	8.0	44.6				patch_overlay
6825		Local	ROBERTS RD	54,55	1502	24	3935		0.0	0.0	324.6			3935	patch_overlay
7728		Local	SAMUEL ST	43	319	24	734	21	6.8	4.0	60.6				patch_overlay
7729		Local	SAMUEL ST	43	270	20	957		0.0	0.0	79.0				patch_overlay

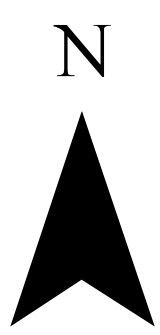
Table 3 - Street Quantities

OBJECT D	COMBINED WITH OBJECT ID	Street Class.	Name	Page No.	Length (ft)	WIDTH (ft)	CAD Measured Milling Area (SYS)	Field Marked HMA Patching Area (SYS)	Comp. Agg. #53 for Patching Base (Tons)	HMA for Patching, Type C (Tons)	HMA Surface (Tons)	PCCP Patching Area (SYS)	Crack Seal (ft)	Glassgrid (SYS)	NOTE
7730	7729	Local	SAMUEL ST	43	261	20		20	6.6	3.9	0.0				patch_overlay
7658		Local	THORNBURG LN	47	604	24	1763	89	29.1	17.1	145.4				patch_overlay
6691		Local	VAUGHT ST	35	396	24	853	86	28.0	16.5	70.4				patch_overlay
6379	7009	Collector	WALNUT ST	52	266	24			0.0	0.0	0.0				patch_overlay
6424	7009	Collector	WALNUT ST	52	357	24		133	43.7	40.3	0.0				patch_overlay
6531	7009	Collector	WALNUT ST	36	360	27		18	5.9	5.4	0.0				patch_overlay
7009		Collector	WALNUT ST	53	860	24	8548		0.0	0.0	705.2				patch_overlay
7167	7009	Collector	WALNUT ST	51	381	24			0.0	0.0	0.0				patch_overlay
6577	7009	Collector	WALNUT ST	52	355	24			0.0	0.0	0.0				patch_overlay
6787	7009	Collector	WALNUT ST	51	254	24			0.0	0.0	0.0				patch_overlay
7212	7009	Collector	WALNUT ST	51	352	24	44		0.0	0.0	3.7				patch_overlay
7553	7009	Collector	WALNUT ST	36	375	26			0.0	0.0	0.0				patch_overlay
6363		Local	WAYNE ST	42	371	29	2378	52	17.1	10.1	196.2				patch_overlay
6959	6363	Local	WAYNE ST	42	357	29			0.0	0.0	0.0				patch_overlay
6921		Local	YOUNCE ST	55,56	970	24	2392		0.0	0.0	197.3	52		2392	patch_overlay
		Local	Parking Lot 1 - Police	65			4104	877	287	169	339				patch_overlay
		Local	Parking Lot - Public Works - 2	65			3637		0	0	600				mill_overlay
		Local	Parking Lot - Public Works - 3A	65			3409		0	0	562				mill_overlay
		Local	Parking Lot - Public Works 3B	65			1244		0	0	205				mill_overlay
		Local	Public Works - 4 Hamilton Ave Facility	66			3017		0	0	498				mill_overlay
			<b>Total</b>				<b>78855</b>	<b>3673</b>	<b>1244</b>	<b>841</b>	<b>7438</b>	<b>346</b>	<b>493</b>	<b>9526</b>	

Table 4 - Street Quantities



## City of Franklin 2015 MIP



0 800 1,600 3,200 4,800 Feet

### Legend

Franklin\_Boundary

### 2015 MIP

roads

### Year 2015

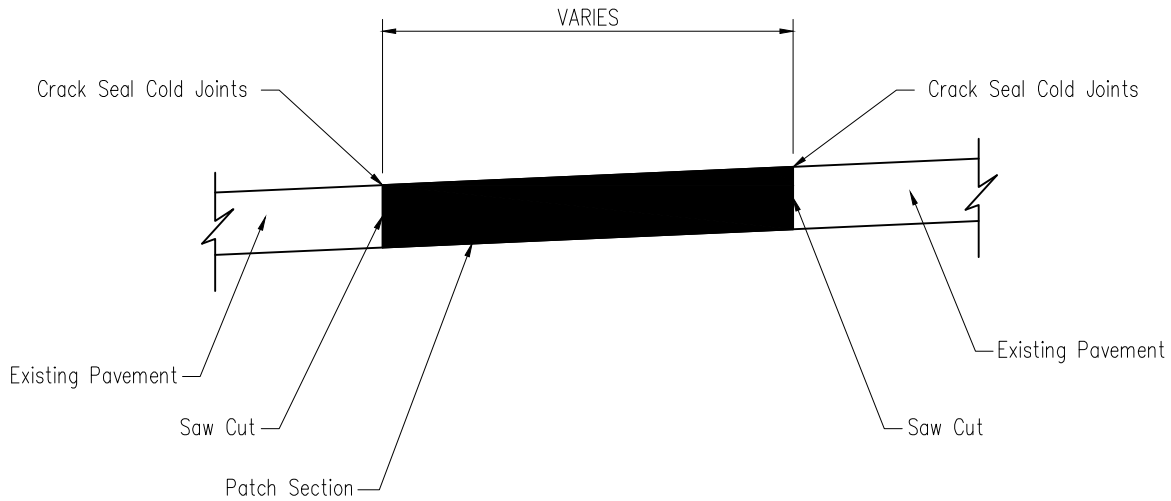
Mill, Patch, and Overlay



**shrewsberry**  
7321 Shadeland Station, Indianapolis IN 46256  
(p) 317.841.4799 (f) 317.841.4790  
shrewsusa.com

Date: 5/12/2015

# PATCHING TYPICAL SECTION



## LOCAL STREETS – PATCH SECTION

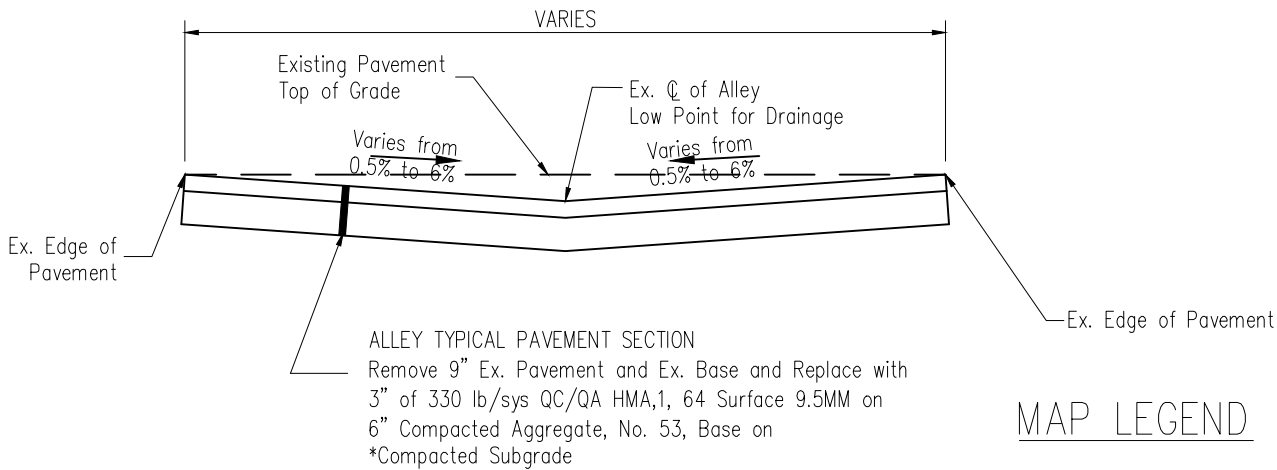
5" = 550 lb/syd HMA FOR PATCHING, TYPE C:  
 165 lb/syd HMA Surface, Type C ON  
 385 lb/syd HMA Intermediate, Type C ON  
 6" Compacted Aggregate, No. 53, Base

## COLLECTOR STREETS – PATCH SECTION

7" = 770 lb/syd HMA FOR PATCHING, TYPE C:  
 165 lb/syd HMA Surface, Type C ON  
 275 lb/syd HMA Intermediate, Type C ON  
 330 lb/syd HMA Base, Type C ON  
 6" Compacted Aggregate, No. 53, Base

## ARTERIAL STREETS – PATCH SECTION

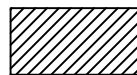
8" = 870 lb/syd HMA FOR PATCHING, TYPE C:  
 165 lb/syd HMA Surface, Type C ON  
 275 lb/syd HMA Intermediate, Type C ON  
 440 lb/syd HMA Base, Type C ON  
 12" Compacted Aggregate, No. 53, Base



## MAP LEGEND



PATCH LOCATIONS (SEE TABLES FOR ROAD CLASSIFICATION AND PATCH PAVEMENT SECTION LAYERS)



MILL & RESURFACE LOCATION

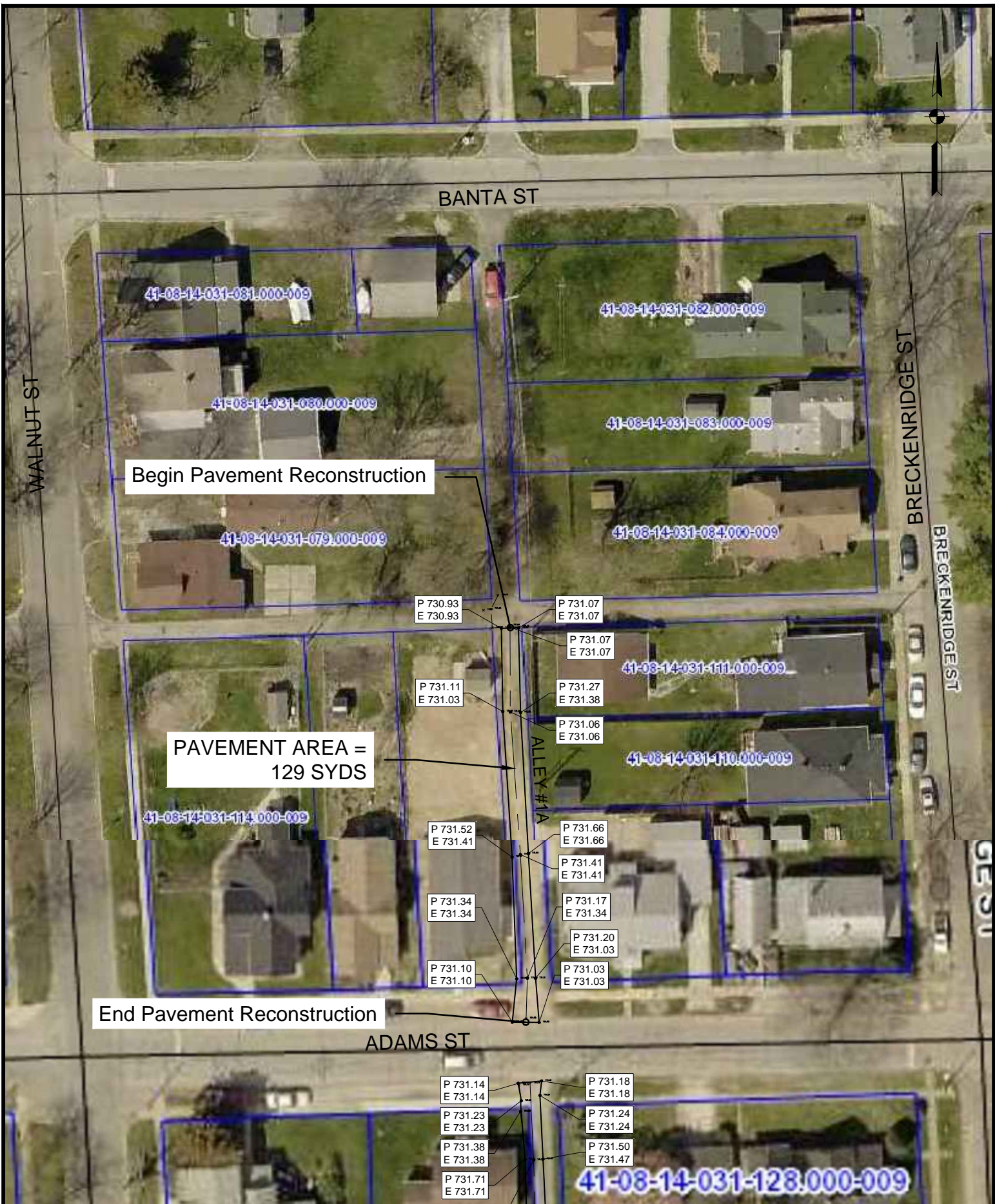
### Miscellaneous Notes

- 1) All materials shall be stored on adjacent street.
- 2) Closure of alleys shall be allowed for up to 48 hours weather permitting.



## CITY OF FRANKLIN 2015 Maintenance Plan

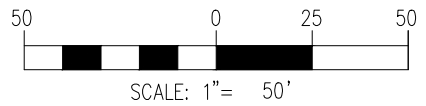
North Short Blvd



Begin Pavement Reconstruction

PAVEMENT AREA =  
129 SYDS

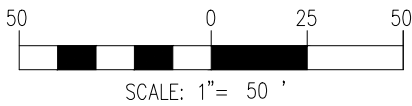
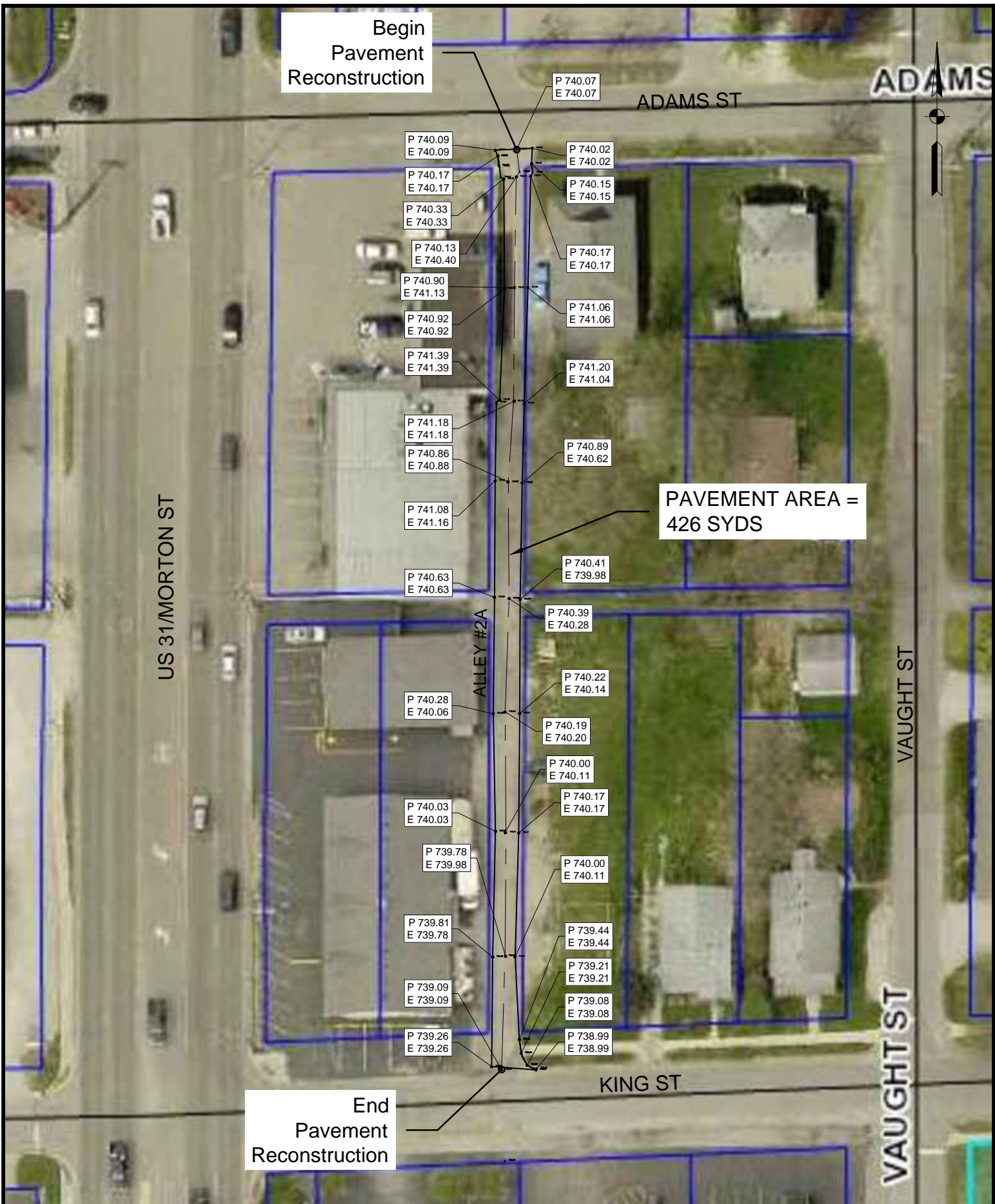
End Pavement Reconstruction



**CITY OF FRANKLIN**  
**2015 Maintenance Plan**  
 Alley Reconstruction

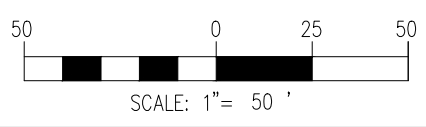
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**CITY OF FRANKLIN**  
**2015 Maintenance Plan**

Alley Reconstruction



**CITY OF FRANKLIN**  
**2015 Maintenance Plan**  
 Alley Reconstruction

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Begin  
Pavement  
Reconstruction

ADAMS ST



P 737.45  
E 737.45

P 737.31  
E 737.31

P 737.48  
E 737.46

P 738.05  
E 738.05

P 737.97  
E 737.97

P 738.76  
E 738.76

41-08-14-032-120.000-009

41-08-14-031-124.000-009

P 739.90  
E 739.90

P 739.87  
E 739.98

P 739.97  
E 739.97

41-08-14-032-121.000-009

P 740.22  
E 740.34

P 740.31  
E 740.31

PAVEMENT AREA =  
345 SYDS

ALLEY #4A

P 740.25  
E 740.25

P 739.90  
E 740.09

P 740.14  
E 740.14

41-08-14-032-122.000-009

41-08-14-031-123.000-009

P 739.93  
E 739.93

P 739.49  
E 739.56

P 739.66  
E 739.66

P 739.51  
E 739.51

P 739.24  
E 739.24

P 739.44  
E 739.52

P 739.32  
E 739.32

P 739.06  
E 739.13

P 739.09  
E 739.09

P 739.14  
E 739.14

P 738.64  
E 738.64

P 738.70  
E 738.70

P 738.67  
E 738.67

P 737.84  
E 737.84

P 737.90  
E 737.88

P 737.84  
E 737.84

P 737.71  
E 737.71

P 737.61  
E 737.61

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E 737.59

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E 737.50

P 737.53  
E 737.53

P 737.48  
E 737.48

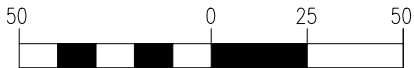
End  
Pavement  
Reconstruction

KING ST

WALNUT ST

WEST ST

WALNUT ST



SCALE: 1" = 50'



# CITY OF FRANKLIN 2015 Maintenance Plan

Alley Reconstruction



ADAMS ST

WALNUT ST

BRECKENRIDGE ST

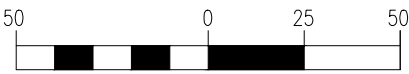
KING ST

Begin  
Pavement  
Reconstruction

Manhole,  
Do Not  
Disturb

PAVEMENT AREA =  
301 SYDS

End  
Pavement  
Reconstruction



**CITY OF FRANKLIN**  
**2015 Maintenance Plan**

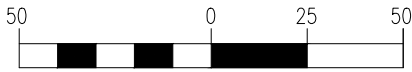
Alley Reconstruction

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**CITY OF FRANKLIN**  
**2015 Maintenance Plan**  
 Alley Reconstruction

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**CITY OF FRANKLIN**  
**2015 Maintenance Plan**

Alley Reconstruction



**CITY OF FRANKLIN**  
**2015 Maintenance Plan**

Alley Reconstruction

J:\7000 OTHERS\14-0042 Franklin Alleys\CADD\14-0042 FIMA.dwg, Alleys (8), 5/15/2015 4:55:35 PM



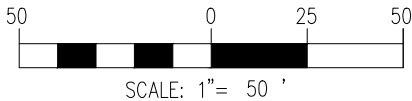
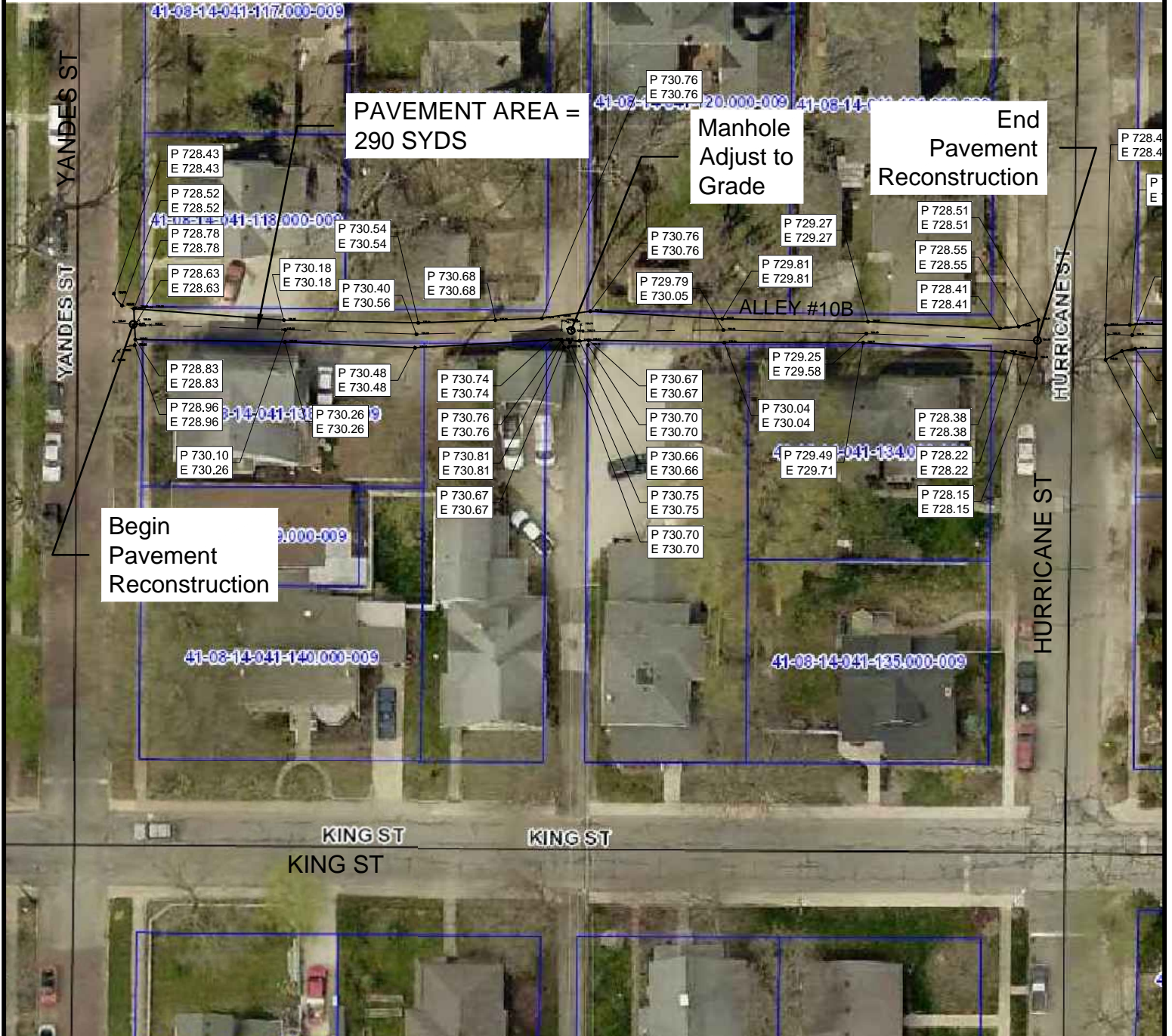
**CITY OF FRANKLIN**  
**2015 Maintenance Plan**

Alley Reconstruction

J:\7000 OTHERS\14-0042 Franklin Alleys\CADD\14-0042 FMA.dwg, Alleys (9), 5/15/2015 4:55:39 PM



ADAMS ST



**CITY OF FRANKLIN**  
**2015 Maintenance Plan**

Alley Reconstruction



ADAMS ST

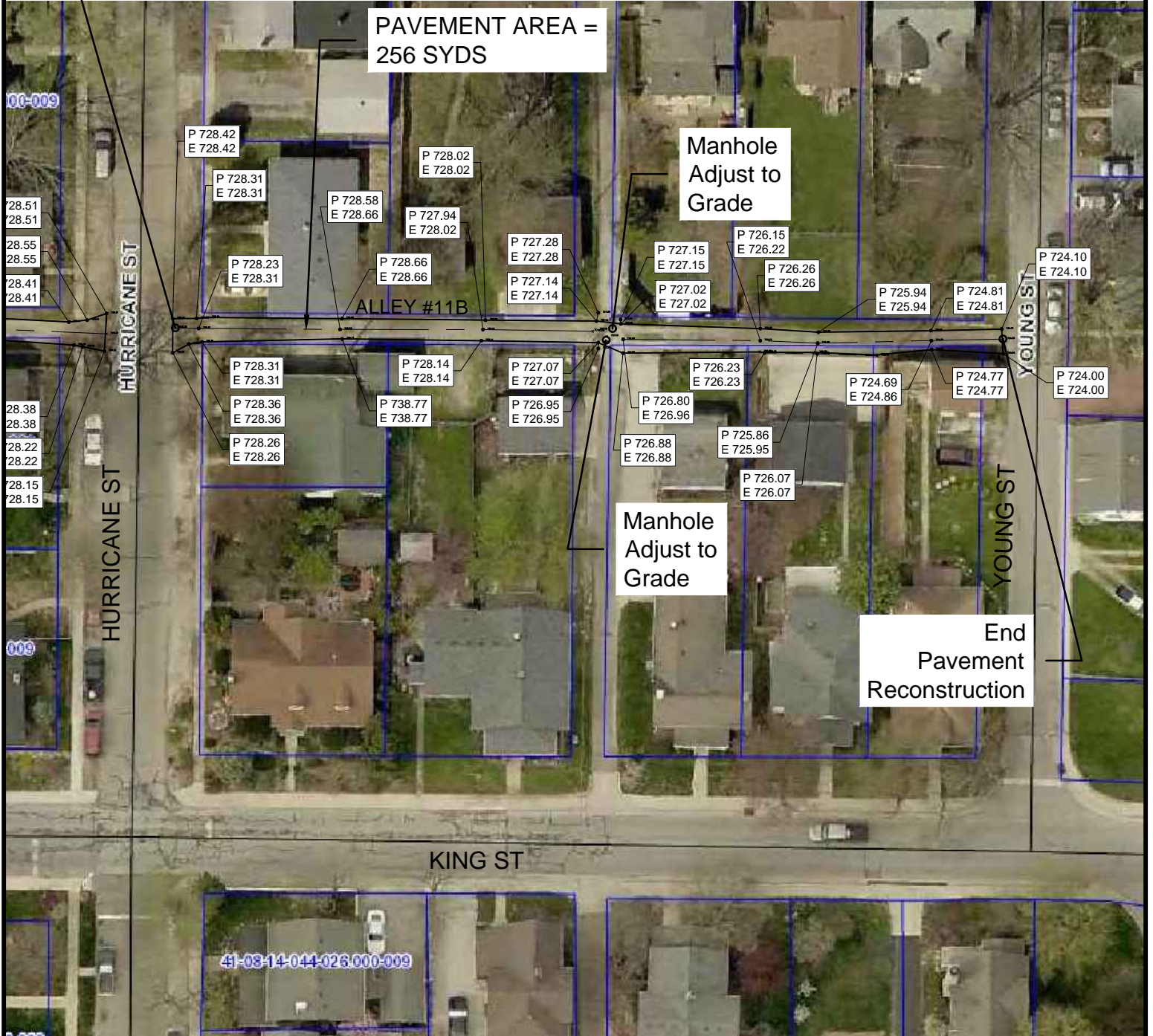
Begin  
Pavement  
Reconstruction

PAVEMENT AREA =  
256 SYDS

Manhole  
Adjust to  
Grade

Manhole  
Adjust to  
Grade

End  
Pavement  
Reconstruction



50 0 25 50

SCALE: 1" = 50'



**CITY OF FRANKLIN**  
**2015 Maintenance Plan**

Alley Reconstruction

SHEET 12 OF 68

E 734.61  
P 734.18  
E 734.18  
P 734.03  
E 734.03

E 735.48

P 734.71  
E 734.66

P 734.71  
E 734.71

P 734.60  
E 734.60

P 734.24  
E 734.24

P 734.10  
E 734.10

KING ST

P 734.13  
E 734.13

WEST ST

Begin  
Pavement  
Reconstruction

P 732.35  
E 732.35

P 731.30  
E 731.24

P 732.61  
E 732.61

P 734.19  
E 734.19

P 731.85  
E 731.85

ALLEY #12B

P 731.38  
E 731.28

P 732.44  
E 732.67

P 734.13  
E 734.13

End  
Pavement  
Reconstruction

P 731.91  
E 731.91

P 732.48  
E 732.48

P 731.30  
E 731.22

P 732.52  
E 732.52

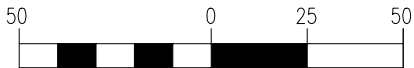
Square  
Inlet  
Adjust to  
Grade

P 731.78  
E 731.95

PAVEMENT AREA =  
146 SYDS

41-08-14-033-021.000-009

MADISON ST

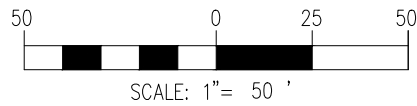


SCALE: 1" = 50'



# CITY OF FRANKLIN 2015 Maintenance Plan

Alley Reconstruction



**CITY OF FRANKLIN**  
**2015 Maintenance Plan**

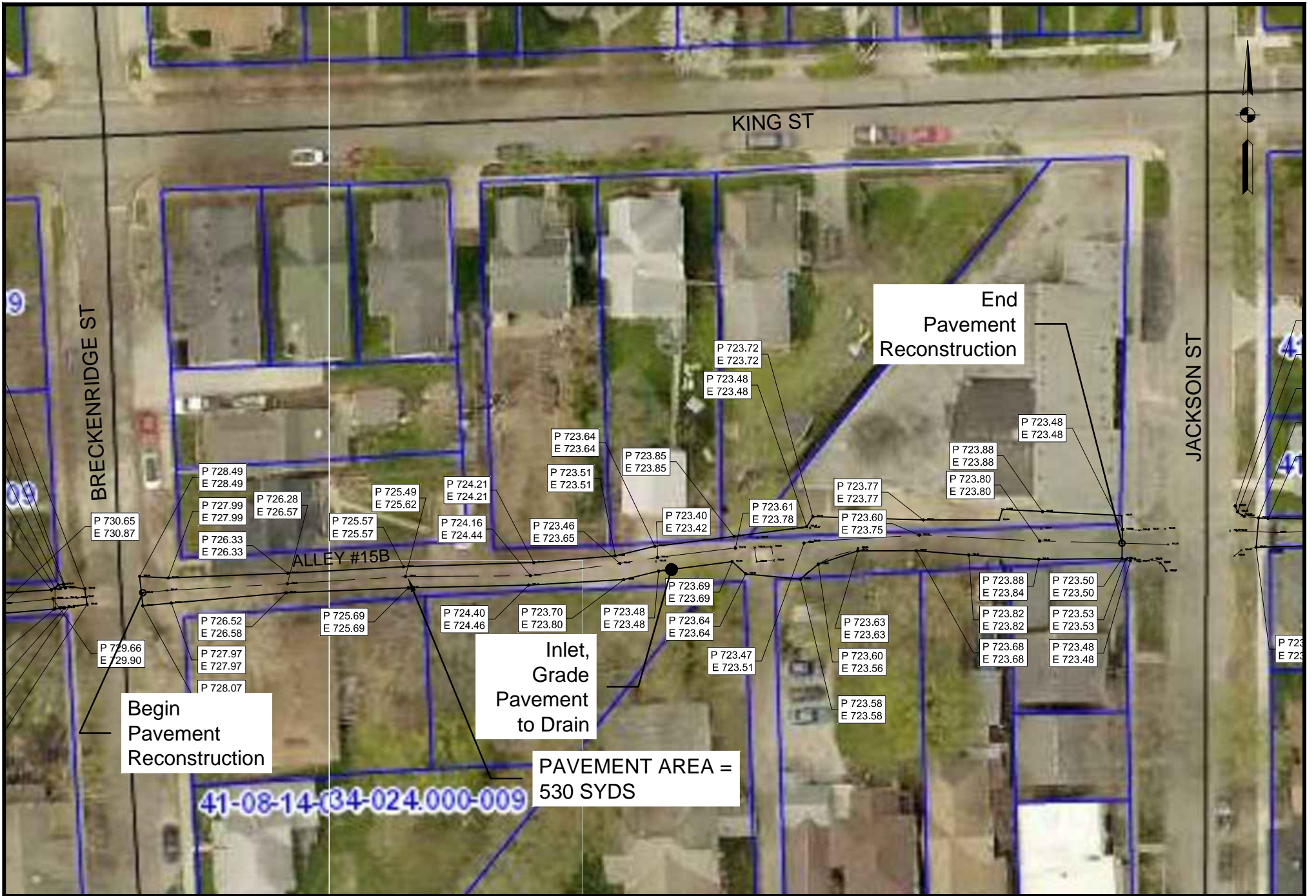
Alley Reconstruction

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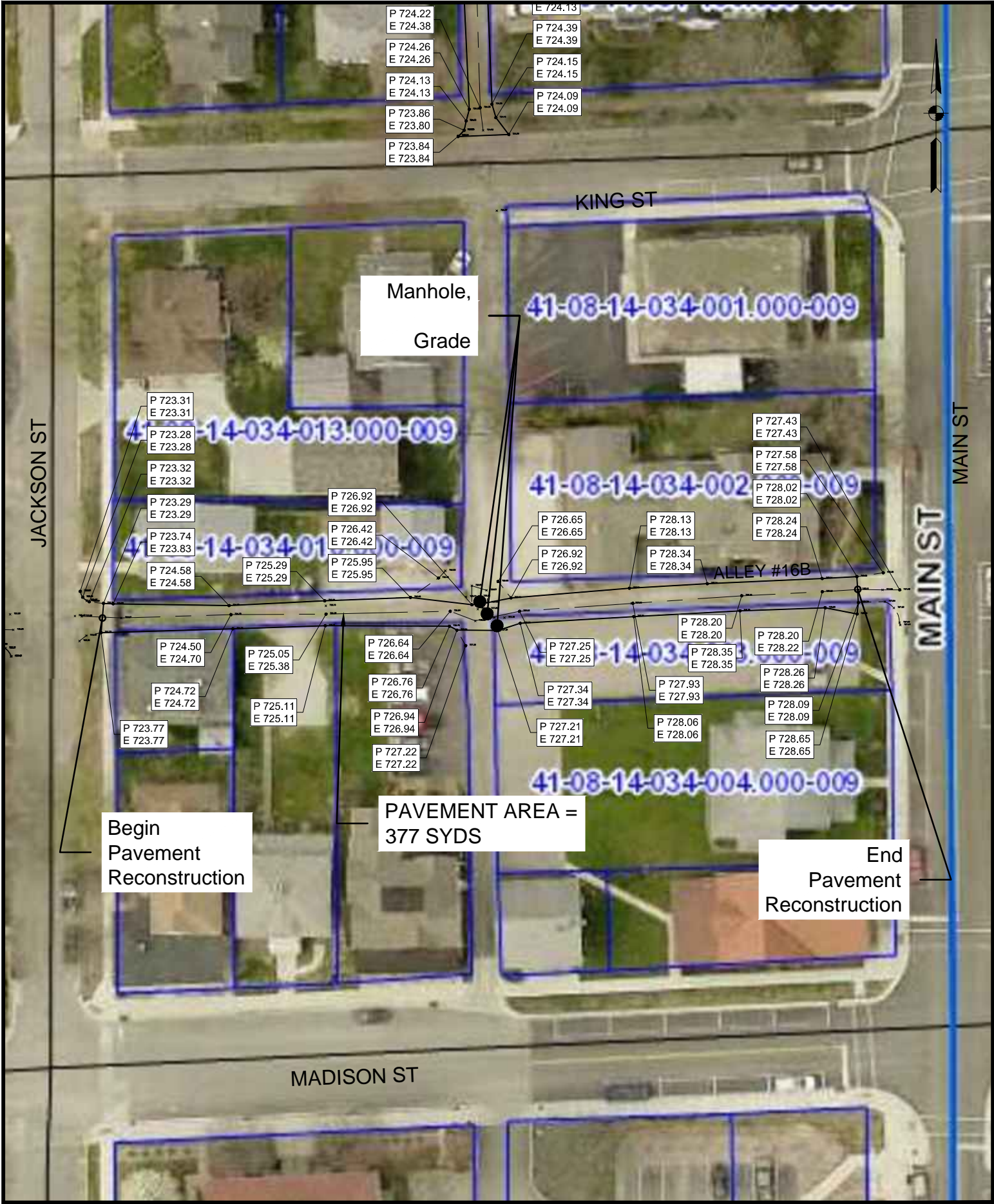
**CITY OF FRANKLIN**  
**2015 Maintenance Plan**

Alley Reconstruction



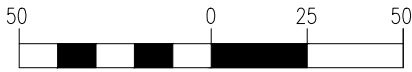
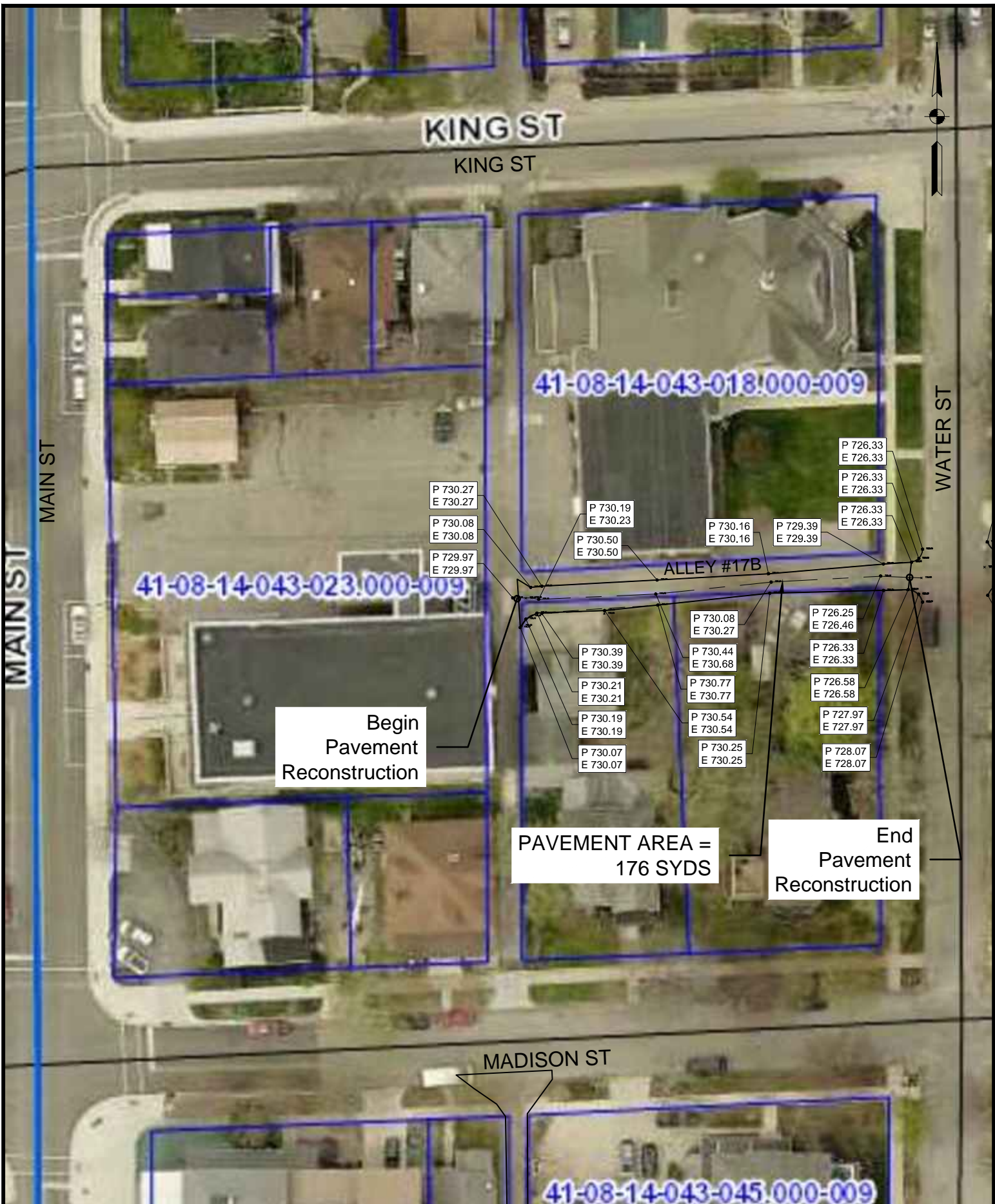
**CITY OF FRANKLIN**  
**2015 Maintenance Plan**  
 Alley Reconstruction

J:\7000 OTHERS\14-0042 Franklin Alleys\CADD\14-0042 FIMA.dwg, Alleys (15), 5/15/2015 4:56:01 PM



**CITY OF FRANKLIN**  
**2015 Maintenance Plan**  
 Alley Reconstruction

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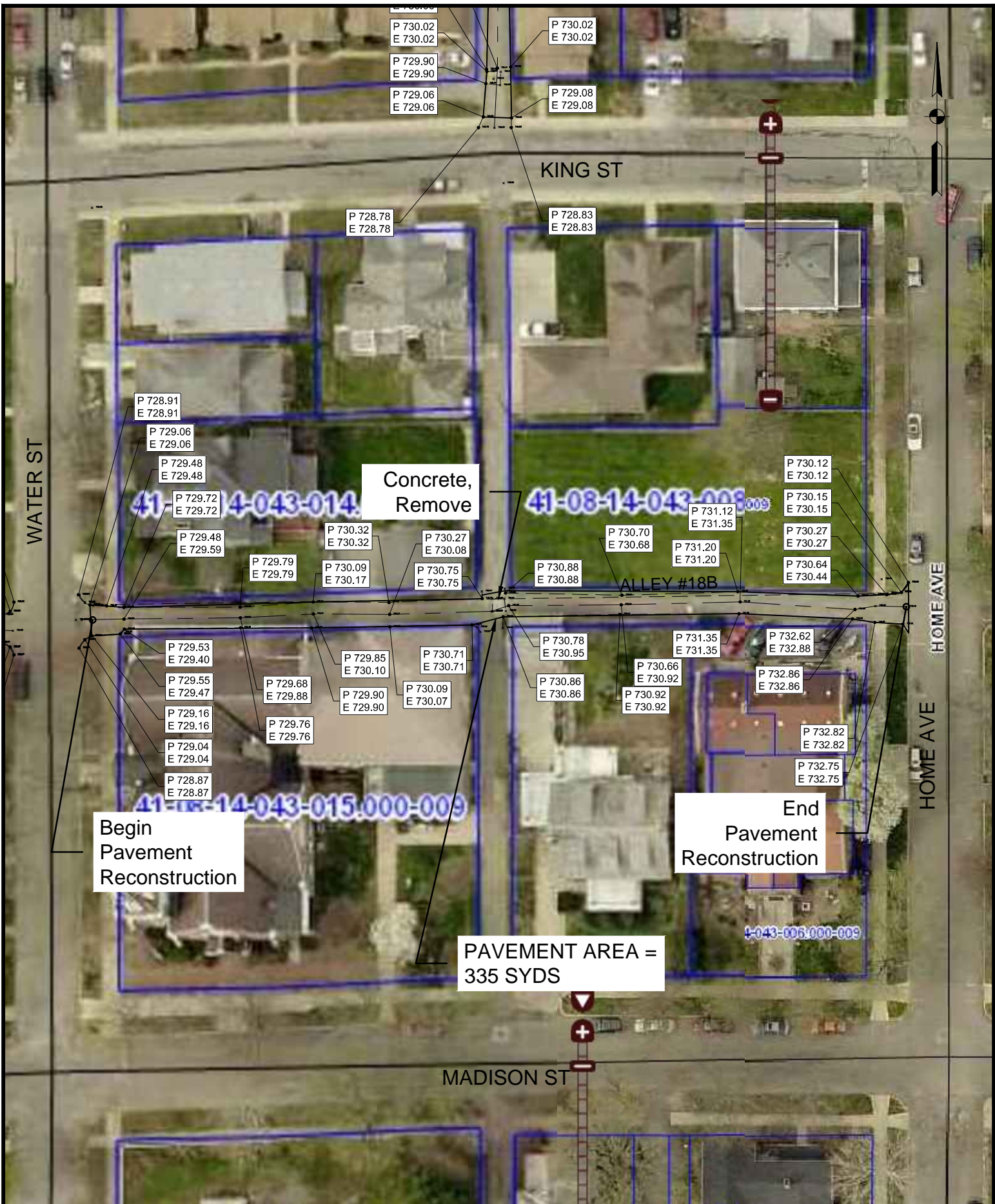
SCALE: 1" = 50'



**CITY OF FRANKLIN**  
**2015 Maintenance Plan**

Alley Reconstruction



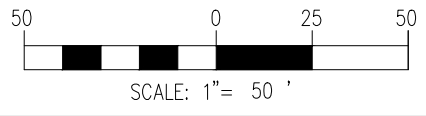


Concrete,  
Remove

End  
Pavement  
Reconstruction

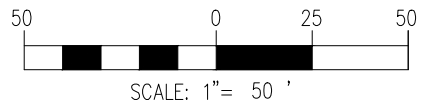
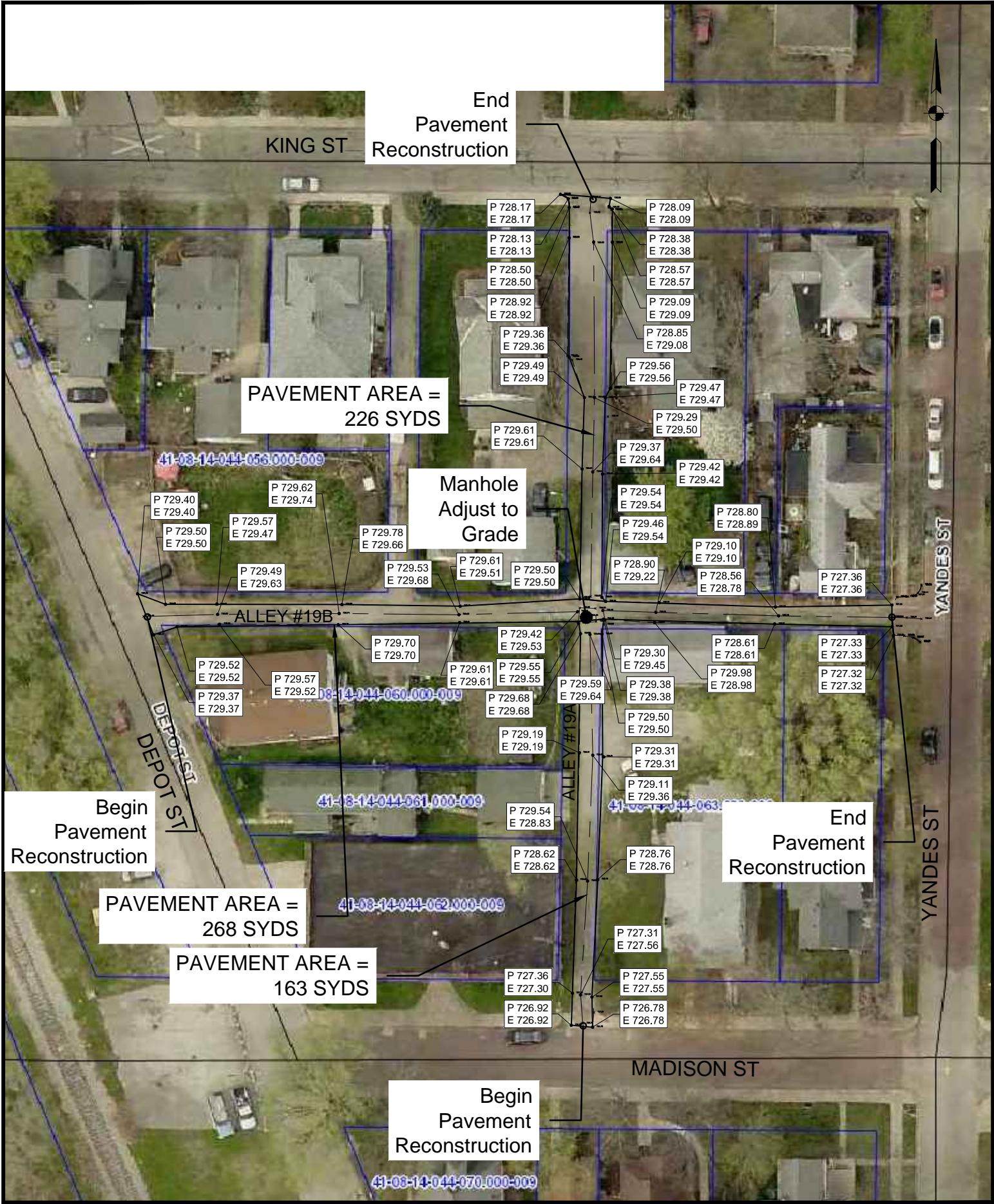
PAVEMENT AREA =  
335 SYDS

Begin  
Pavement  
Reconstruction



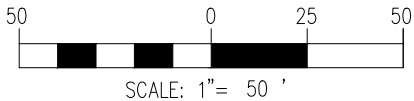
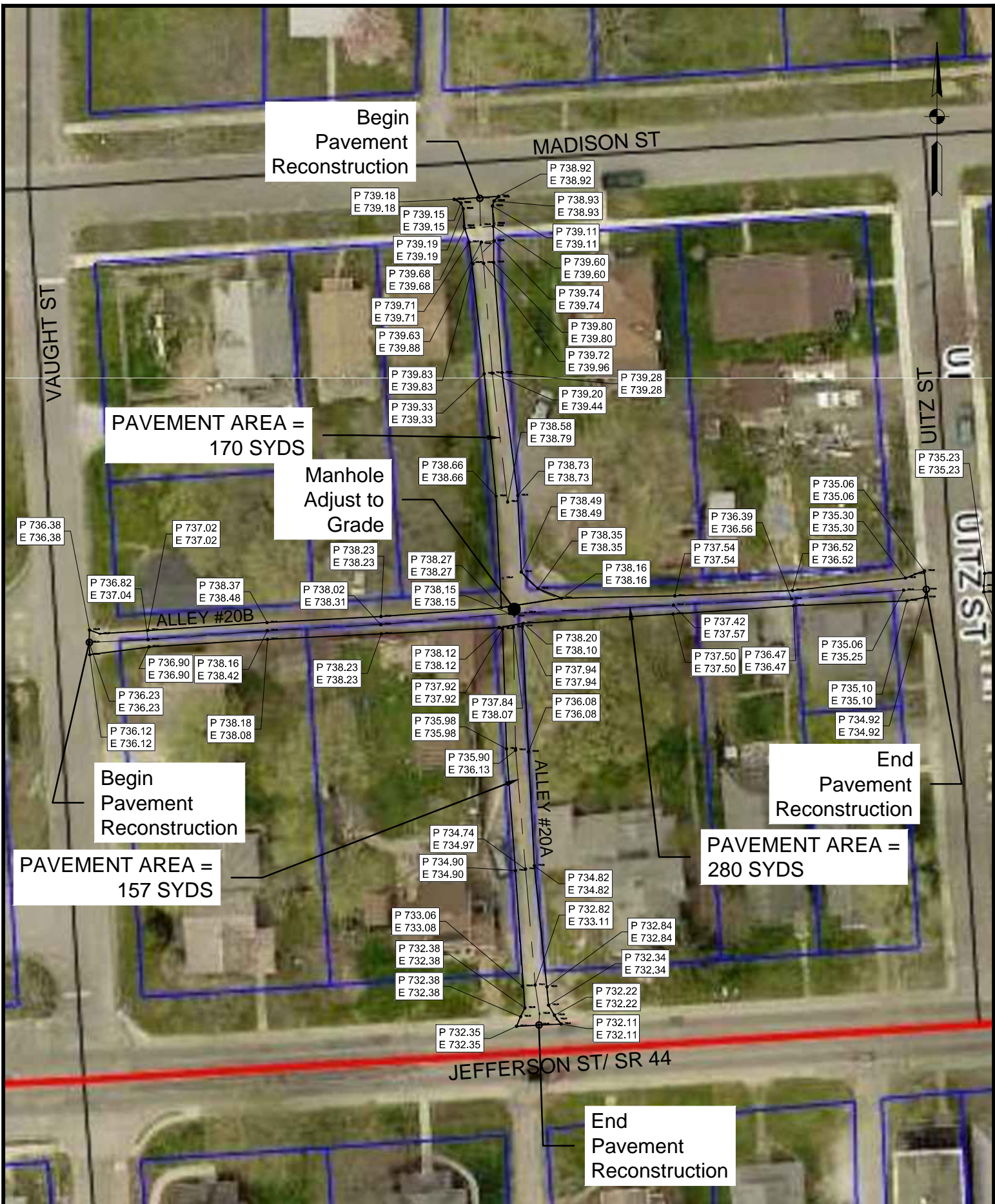
**CITY OF FRANKLIN**  
**2015 Maintenance Plan**  
Alley Reconstruction

J:\7000 OTHERS\14-0042 Franklin Alleys\CADD\14-0042 FIMA.dwg, Alleys (18), 5/15/2015 4:56:11 PM



**CITY OF FRANKLIN**  
**2015 Maintenance Plan**  
 Alley Reconstruction

J:\7000 OTHERS\14-0042 Franklin Alleys\CADD\14-0042 FMA.dwg, Alleys (19), 5/15/2015 4:56:14 PM



**CITY OF FRANKLIN**  
**2015 Maintenance Plan**

Alley Reconstruction



41-08-14-033-025.000-009

33-026.000-009

Manhole  
Adjust to  
Grade

ALLEY #21B

Begin  
Pavement  
Reconstruction

PAVEMENT AREA =  
316 SYDS

End  
Pavement  
Reconstruction

- P 735.23  
E 735.23
- P 735.73  
E 735.73
- P 737.95  
E 738.12
- P 738.22  
E 738.47
- P 738.19  
E 738.19
- P 738.45  
E 738.45
- P 738.30  
E 738.44
- P 738.36  
E 738.36
- P 737.89  
E 738.08
- P 737.37  
E 737.37
- P 738.00  
E 738.00
- P 736.00  
E 736.00
- P 735.60  
E 735.60
- P 738.36  
E 738.36
- P 737.29  
E 737.39
- P 735.94  
E 736.03
- P 737.97  
E 737.97
- P 738.24  
E 738.32
- P 738.32  
E 738.32
- P 737.46  
E 737.46
- P 735.96  
E 735.96
- P 735.63  
E 735.63
- P 737.97  
E 737.94
- P 738.29  
E 738.37
- P 738.44  
E 738.44
- P 735.68  
E 735.68
- P 735.16  
E 735.16

JEFFERSON ST/ SR 44



**CITY OF FRANKLIN**  
**2015 Maintenance Plan**  
Alley Reconstruction

J:\7000 OTHERS\14-0042 Franklin Alleys\CADD\14-0042 FMA.dwg, Alleys (21), 5/15/2015 4:56:22 PM

MADISON ST

MADISON ST

WALNUT ST

41-08-14-034-067.000-009

P 735.60  
E 735.60

P 735.86  
E 735.86

P 736.07  
E 736.07

P 736.05  
E 736.22

P 737.11  
E 737.11

P 738.50  
E 738.41

P 738.45  
E 738.63

P 737.32  
E 737.28

P 735.93  
E 735.93

P 735.66  
E 735.68

P 735.42  
E 735.78

P 734.08  
E 734.08

P 734.00  
E 734.21

P 734.12  
E 734.12

P 729.78  
E 729.78

P 731.25  
E 731.25

P 727.97  
E 727.97

P 727.06  
E 727.92

P 728.14  
E 728.03

P 728.22  
E 728.22

P 728.10  
E 728.25

P 728.12  
E 728.12

P 728.06  
E 727.96

P 727.99  
E 727.91

P 727.94  
E 727.94

P 731.18  
E 731.26

P 731.39  
E 731.39

P 730.89  
E 730.89

P 729.67  
E 729.83

P 729.75  
E 729.75

P 737.20  
E 737.20

P 736.26  
E 736.26

P 735.74  
E 735.74

P 738.69  
E 738.78

P 737.03  
E 737.19

P 737.30  
E 737.50

P 737.54  
E 737.54

P 736.04  
E 736.04

P 735.74  
E 736.14

P 735.44  
E 735.44

P 736.58  
E 736.76

P 736.66  
E 736.66

Begin  
Pavement  
Reconstruction

End  
Pavement  
Reconstruction

PAVEMENT AREA =  
335 SYDS

PAVEMENT AREA =  
152 SYDS

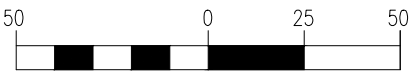
WEST ST

ALLEY #22B

ALLEY #22A

JEFFERSON ST/ SR 44

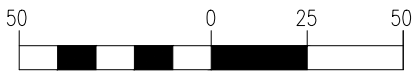
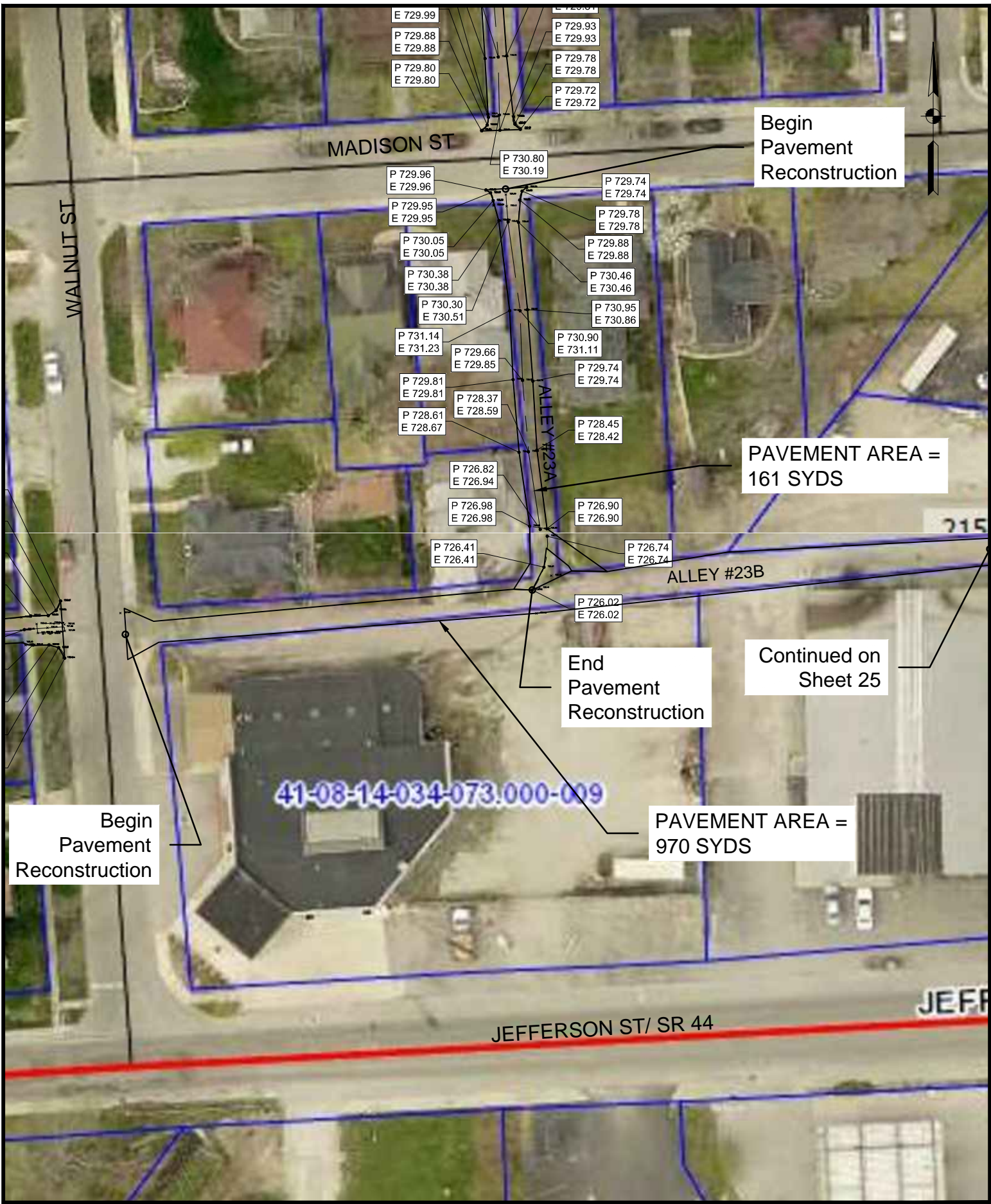
End  
Pavement  
Reconstruction



# CITY OF FRANKLIN 2015 Maintenance Plan

Alley Reconstruction

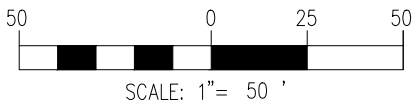
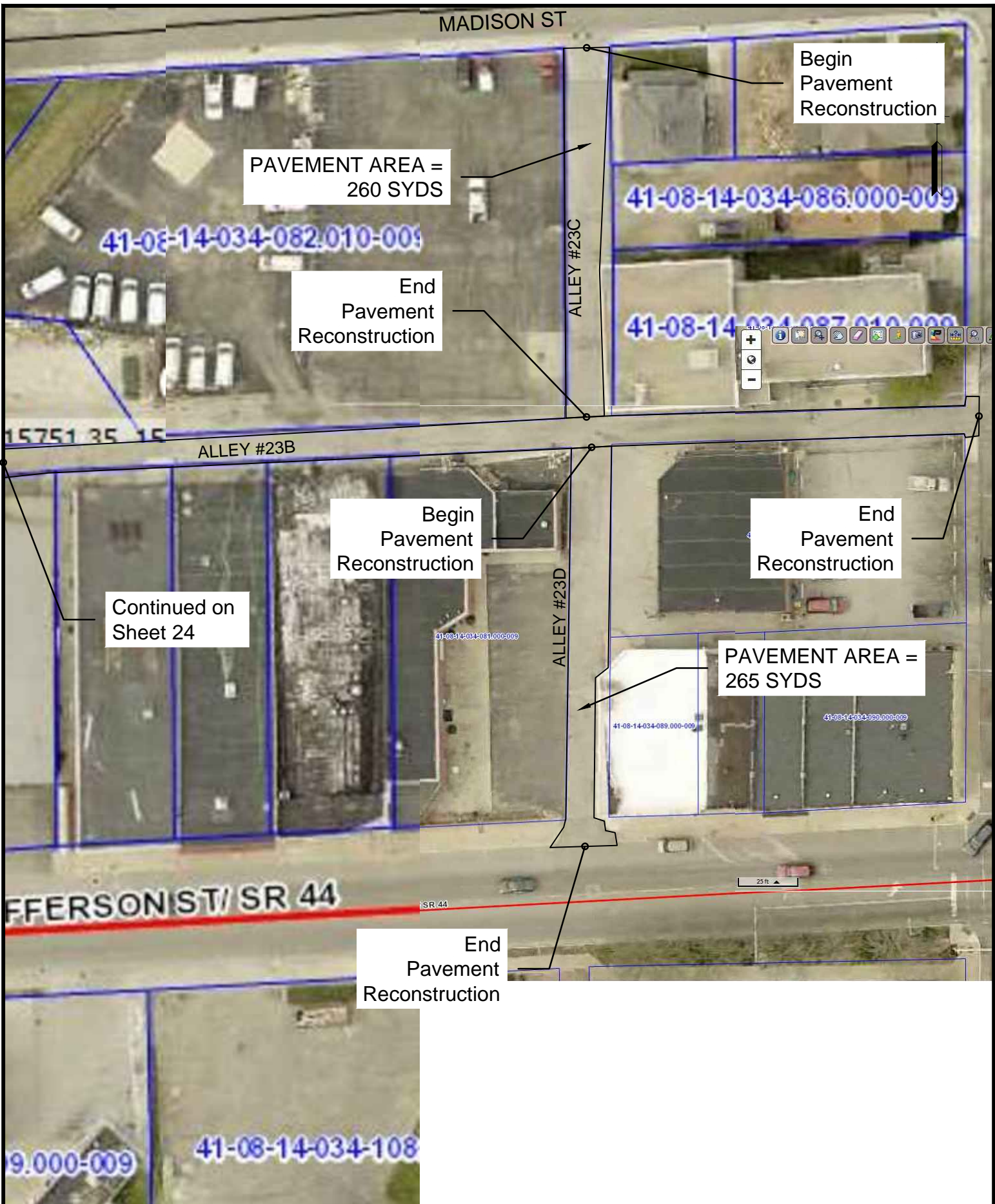
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**CITY OF FRANKLIN**  
**2015 Maintenance Plan**

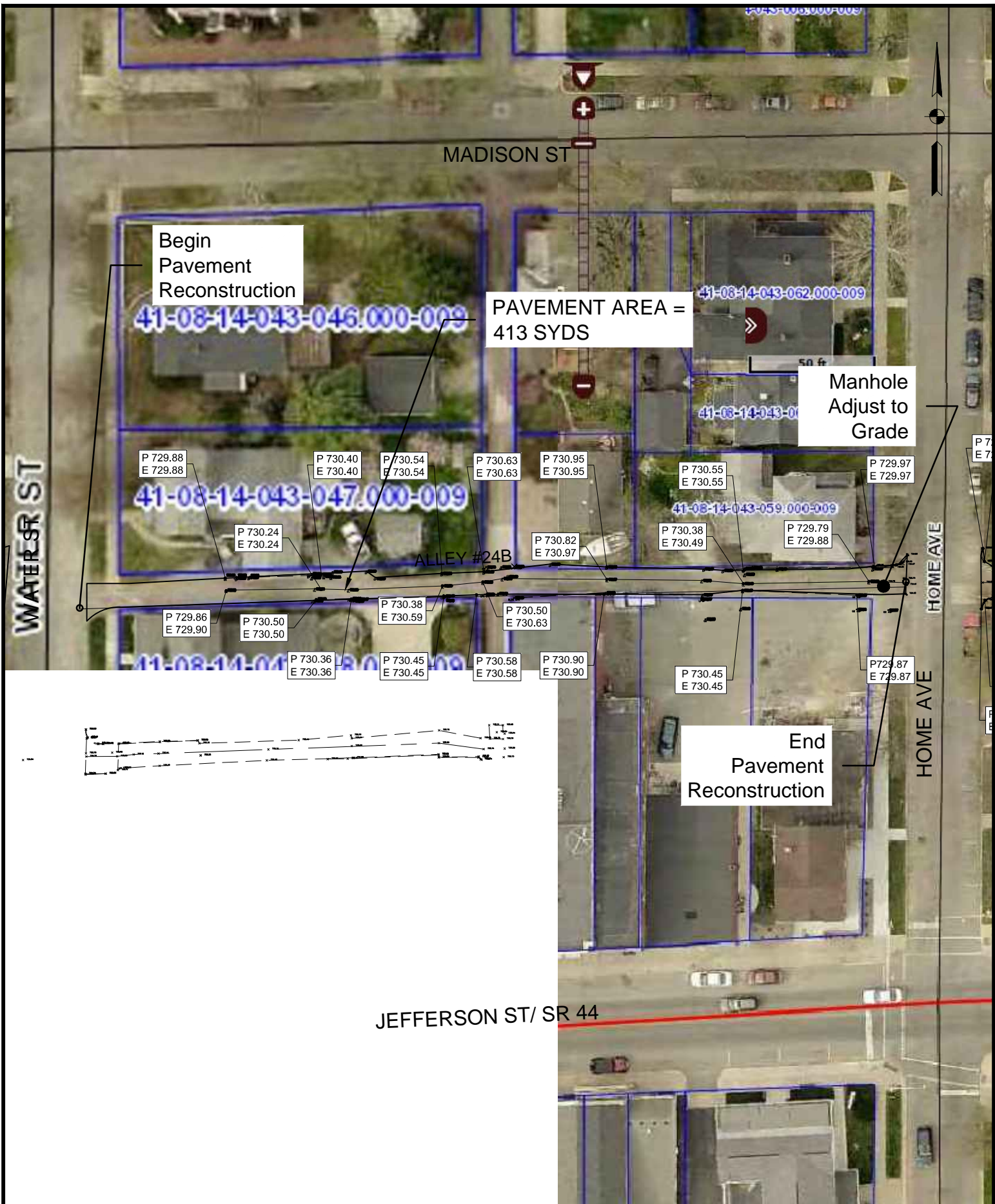
Alley Reconstruction

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**CITY OF FRANKLIN**  
**2015 Maintenance Plan**

Alley Reconstruction



Begin  
Pavement  
Reconstruction

PAVEMENT AREA =  
413 SYDS

Manhole  
Adjust to  
Grade

End  
Pavement  
Reconstruction

P 729.88  
E 729.88

P 730.40  
E 730.40

P 730.54  
E 730.54

P 730.63  
E 730.63

P 730.95  
E 730.95

P 730.55  
E 730.55

P 729.97  
E 729.97

P 730.24  
E 730.24

P 730.82  
E 730.97

P 730.38  
E 730.49

P 729.79  
E 729.88

P 729.86  
E 729.90

P 730.50  
E 730.50

P 730.38  
E 730.59

P 730.50  
E 730.63

P 730.36  
E 730.36

P 730.45  
E 730.45

P 730.58  
E 730.58

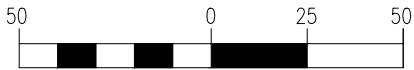
P 730.90  
E 730.90

P 730.45  
E 730.45

P 729.87  
E 729.87



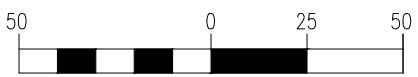
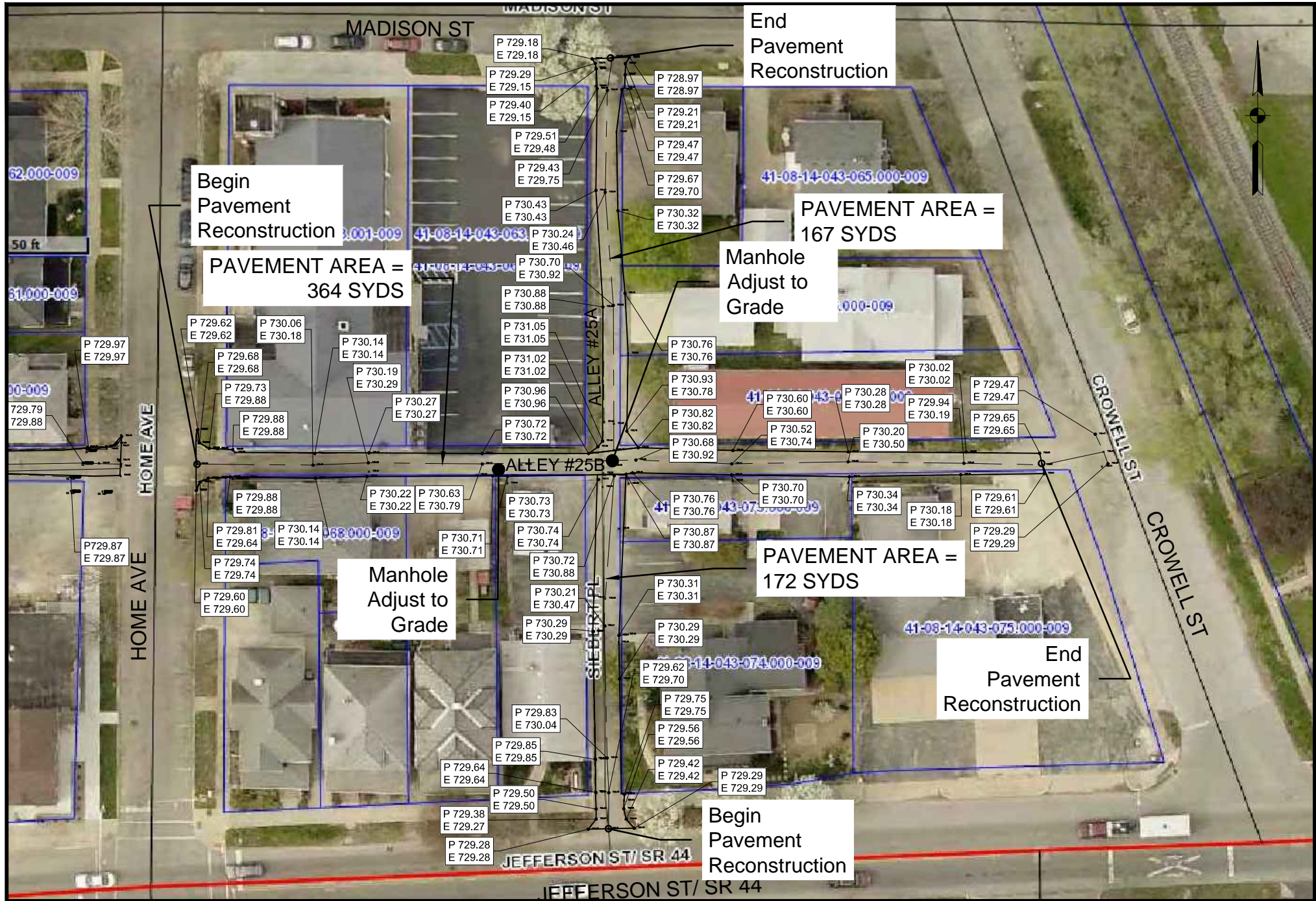
JEFFERSON ST/ SR 44



**CITY OF FRANKLIN**  
**2015 Maintenance Plan**

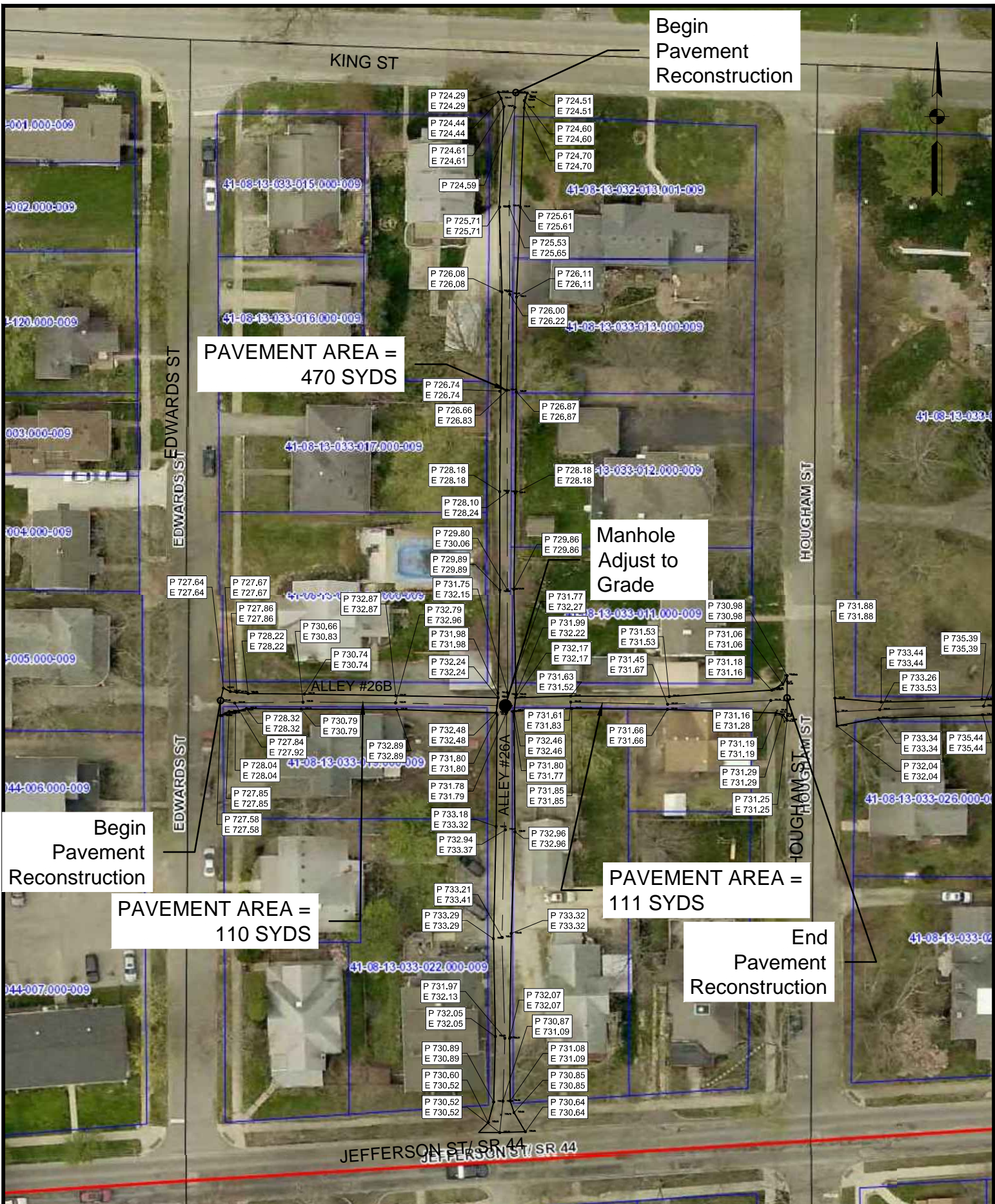
Alley Reconstruction





**CITY OF FRANKLIN**  
**2015 Maintenance Plan**

Alley Reconstruction



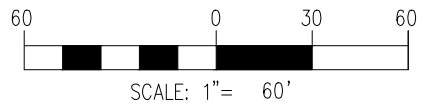
Begin Pavement Reconstruction

PAVEMENT AREA = 110 SYDS

Manhole Adjust to Grade

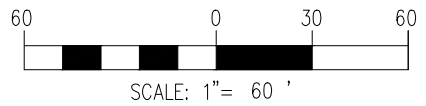
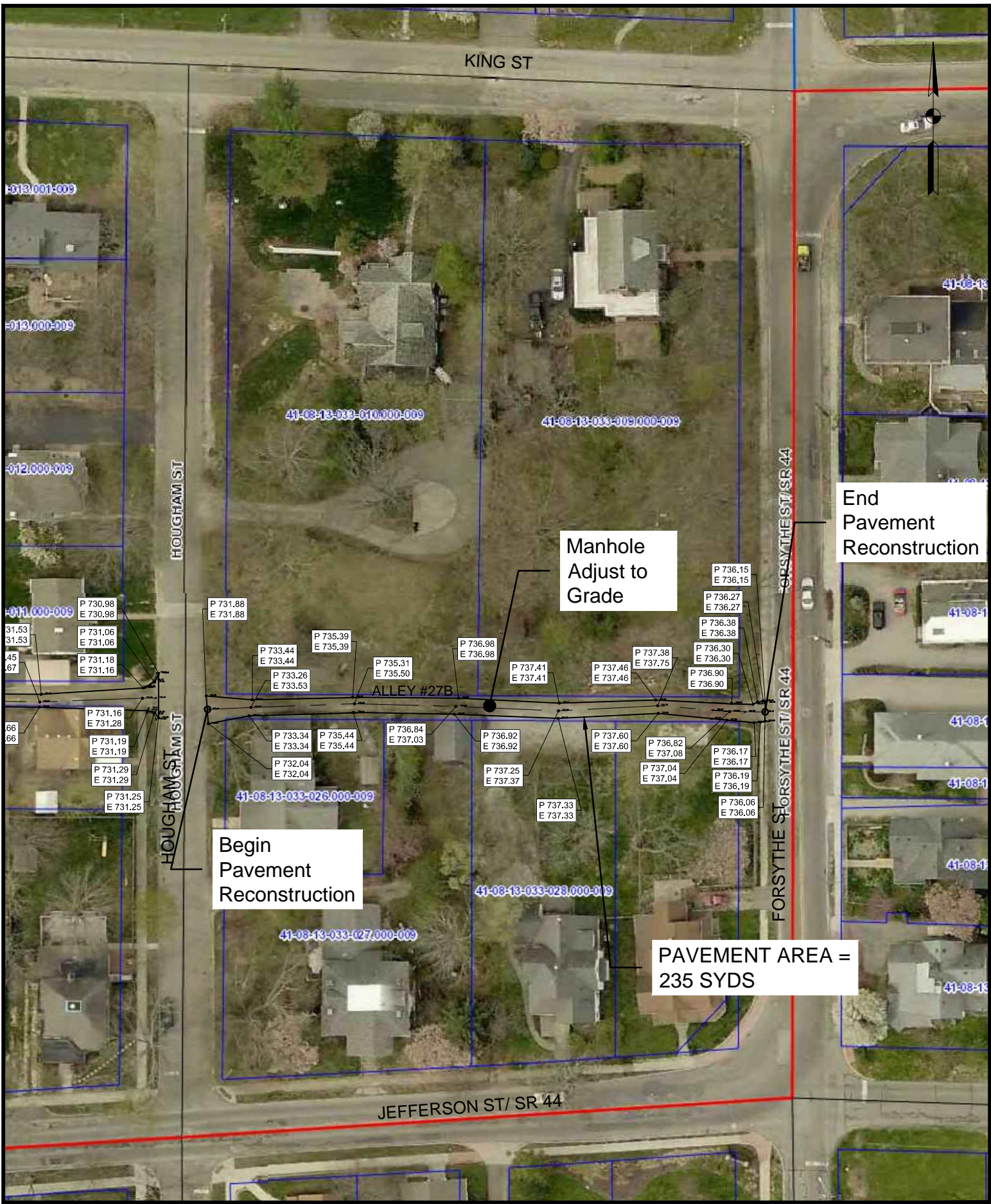
PAVEMENT AREA = 111 SYDS

End Pavement Reconstruction



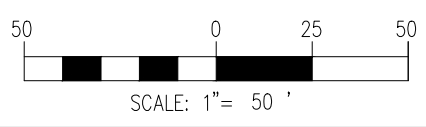
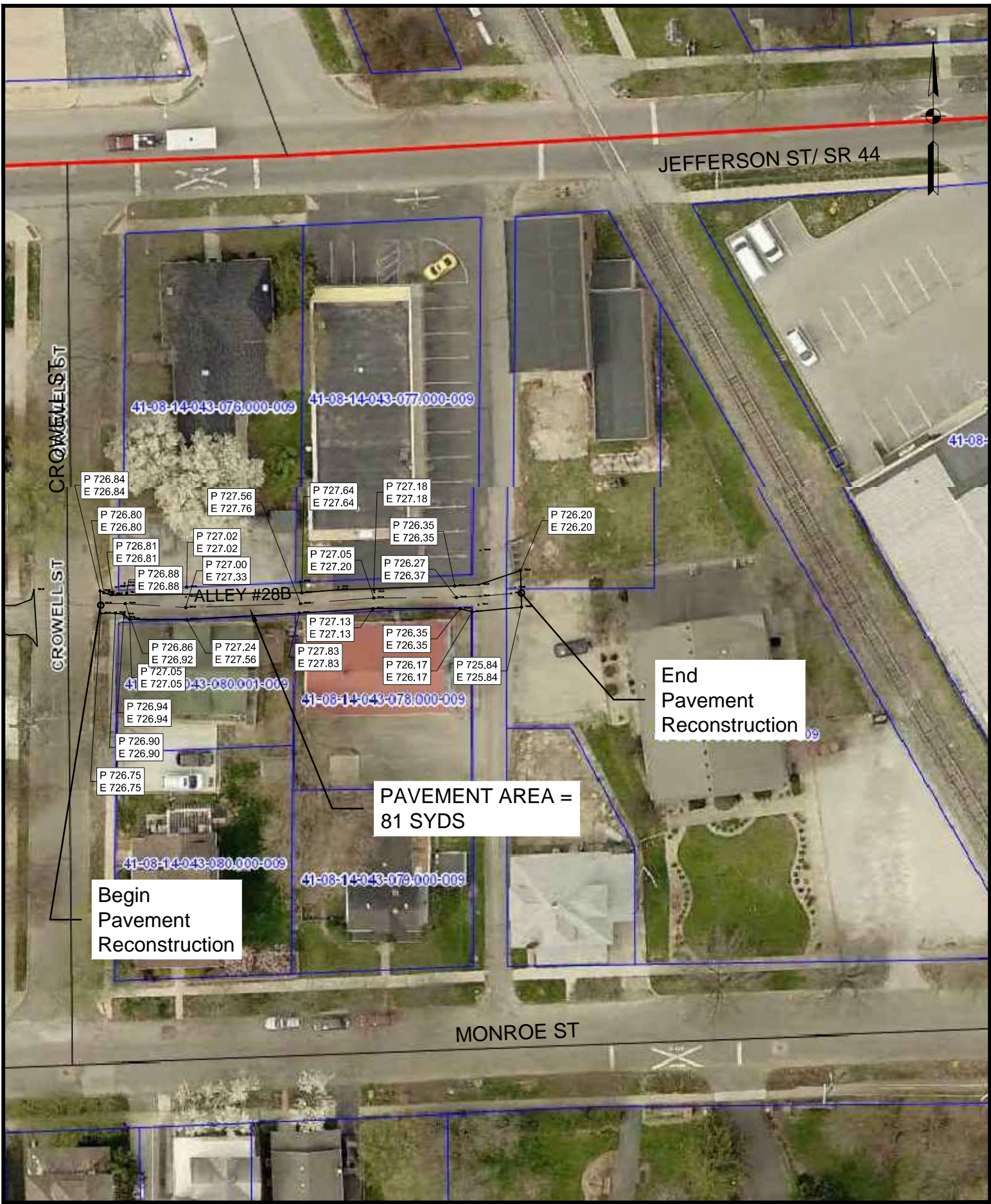
**CITY OF FRANKLIN**  
**2015 Maintenance Plan**  
 Alley Reconstruction

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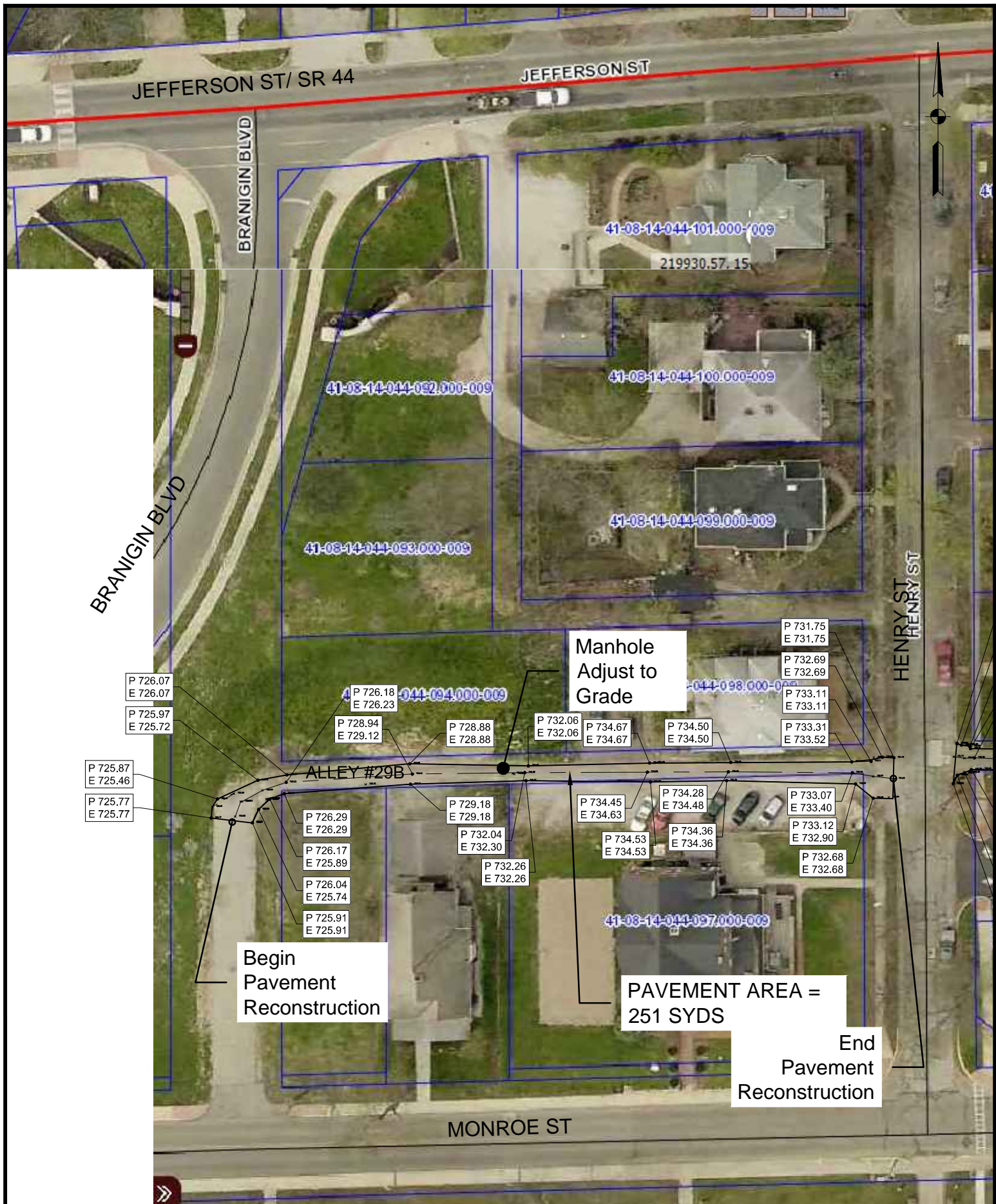
**CITY OF FRANKLIN**  
**2015 Maintenance Plan**  
 Alley Reconstruction

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**CITY OF FRANKLIN**  
**2015 Maintenance Plan**  
 Alley Reconstruction

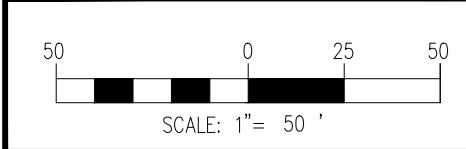
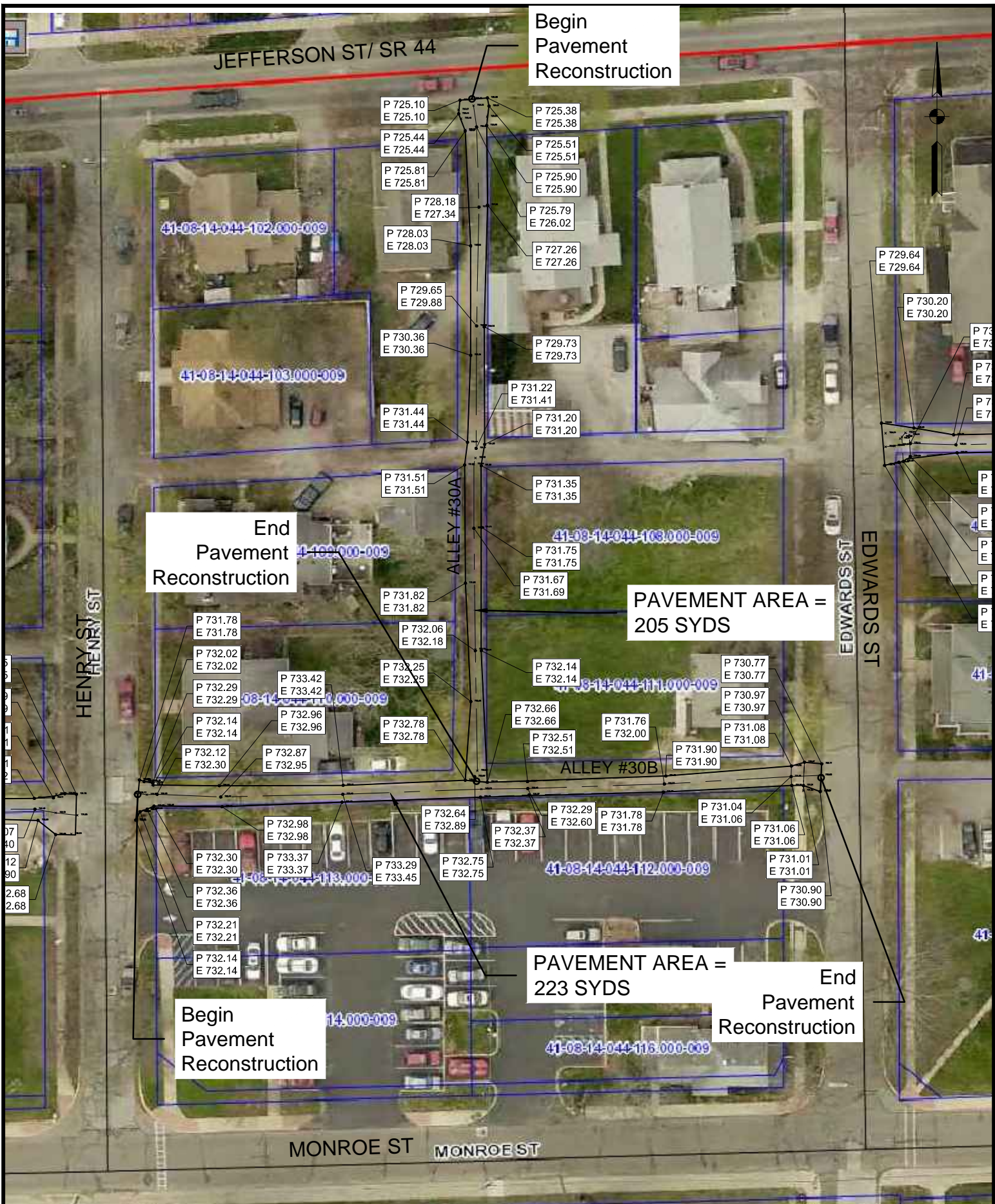
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**CITY OF FRANKLIN**  
**2015 Maintenance Plan**

Alley Reconstruction

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**CITY OF FRANKLIN**  
**2015 Maintenance Plan**  
 Alley Reconstruction

J:\7000 OTHERS\14-0042 Franklin Alleys\CADD\14-0042 FMA.dwg, Alleys (30), 5/15/2015 4:56:56 PM

JEFFERSON ST/ SR 44

Begin Pavement Reconstruction

End Pavement Reconstruction

P 729.64  
E 729.64

P 730.20  
E 730.20

P 730.14  
E 730.14

P 730.76  
E 730.76

P 730.68  
E 730.84

P 731.16  
E 731.37

P 731.24  
E 731.24

P 731.79  
E 731.79

P 731.71  
E 731.89

P 732.25  
E 732.25

P 732.16  
E 732.27

P 732.55  
E 732.71

P 732.40  
E 732.40

P 732.41  
E 732.52

P 732.42  
E 732.83

P 732.44  
E 732.79

P 732.43  
E 732.67

P 732.69  
E 732.69

P 732.70  
E 732.70

P 732.97  
E 732.97

P 733.06  
E 733.18

ALLEY #31B

P 730.80  
E 730.80

P 730.29  
E 730.29

P 730.30  
E 730.30

P 730.29  
E 730.29

P 729.74  
E 729.74

P 731.95  
E 731.95

P 731.40  
E 731.40

P 732.24  
E 732.24

P 732.63  
E 732.63

P 732.35  
E 732.62

P 732.43  
E 732.62

P 732.35  
E 732.35

P 733.2  
E 733.2

P 732.97  
E 732.97

P 732.81  
E 732.81

PAVEMENT AREA =  
254 SYDS

EDWARDS ST

HOUGHAM ST

HOUGHAM ST

MONROE ST

P 730.77  
E 730.77

P 730.97  
E 730.97

P 731.08  
E 731.08

P 731.06  
E 731.06

P 731.01  
E 731.01

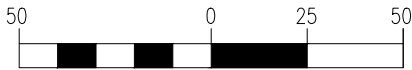
P 730.90  
E 730.90

41-08-13-033-077.000-009

41-08-13-033-078.000-009

41-08-13-033-080.003-009

41-08-13-033-080.000-009



SCALE: 1" = 50'



# CITY OF FRANKLIN 2015 Maintenance Plan

Alley Reconstruction

JEFFERSON ST/ SR 44

41-08-13-0

FORSYTHE ST

40  
40  
41  
52  
42  
33  
44  
79  
43  
37

35  
32  
43  
32  
35  
35

P 732.69  
E 732.69

P 732.70  
E 732.70

P 732.97  
E 732.97

P 733.06  
E 733.18

P 736.55  
E 736.55

P 736.31  
E 736.61

P 736.38  
E 736.38

P 733.20  
E 733.20

P 732.97  
E 732.97

P 732.81  
E 732.81

P 737.41  
E 737.41

P 738.27  
E 738.27

P 738.08  
E 738.27

P 738.16  
E 738.16

P 737.38  
E 737.38

P 737.12  
E 737.12

P 737.16  
E 737.16

41-08-13-033-068.000-009

41-08-13-033-056.000-009

41-08-13-033-067.000-009

41-08-13-033-057.000-009

41-08-13-033-067.001-009

ALLEY #32B

End  
Pavement  
Reconstruction

PAVEMENT AREA =  
136 SYDS

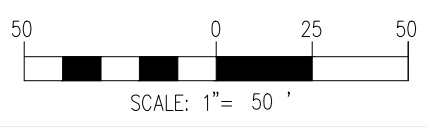
Begin  
Pavement  
Reconstruction

HOUGHAM ST

HOUGHAM ST

FORSYTHE ST

MONROE ST

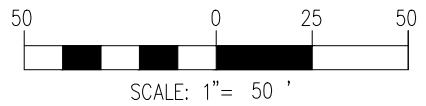
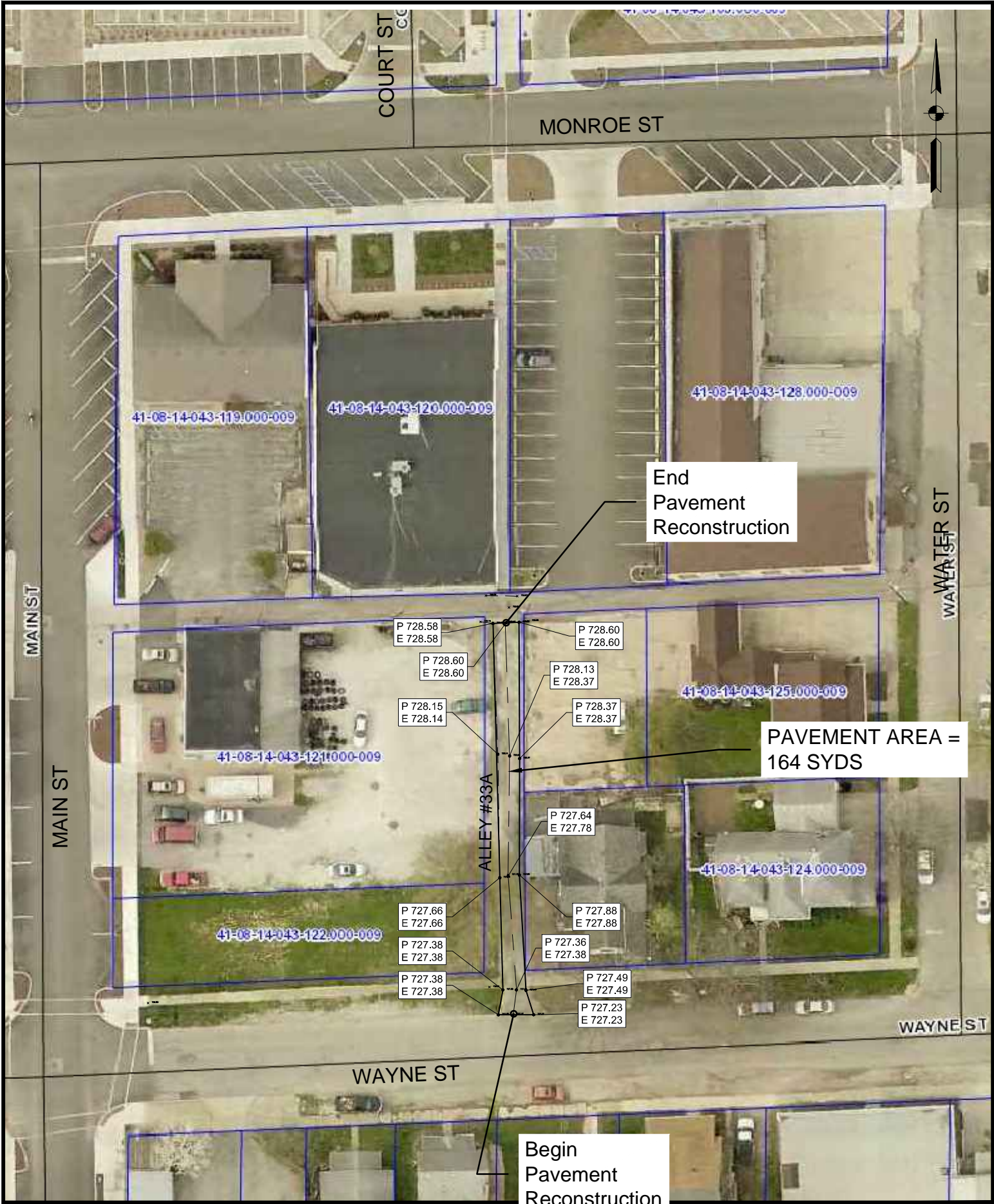


# CITY OF FRANKLIN 2015 Maintenance Plan

Alley Reconstruction

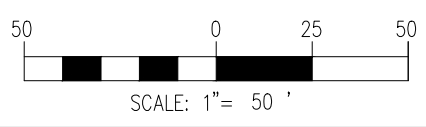
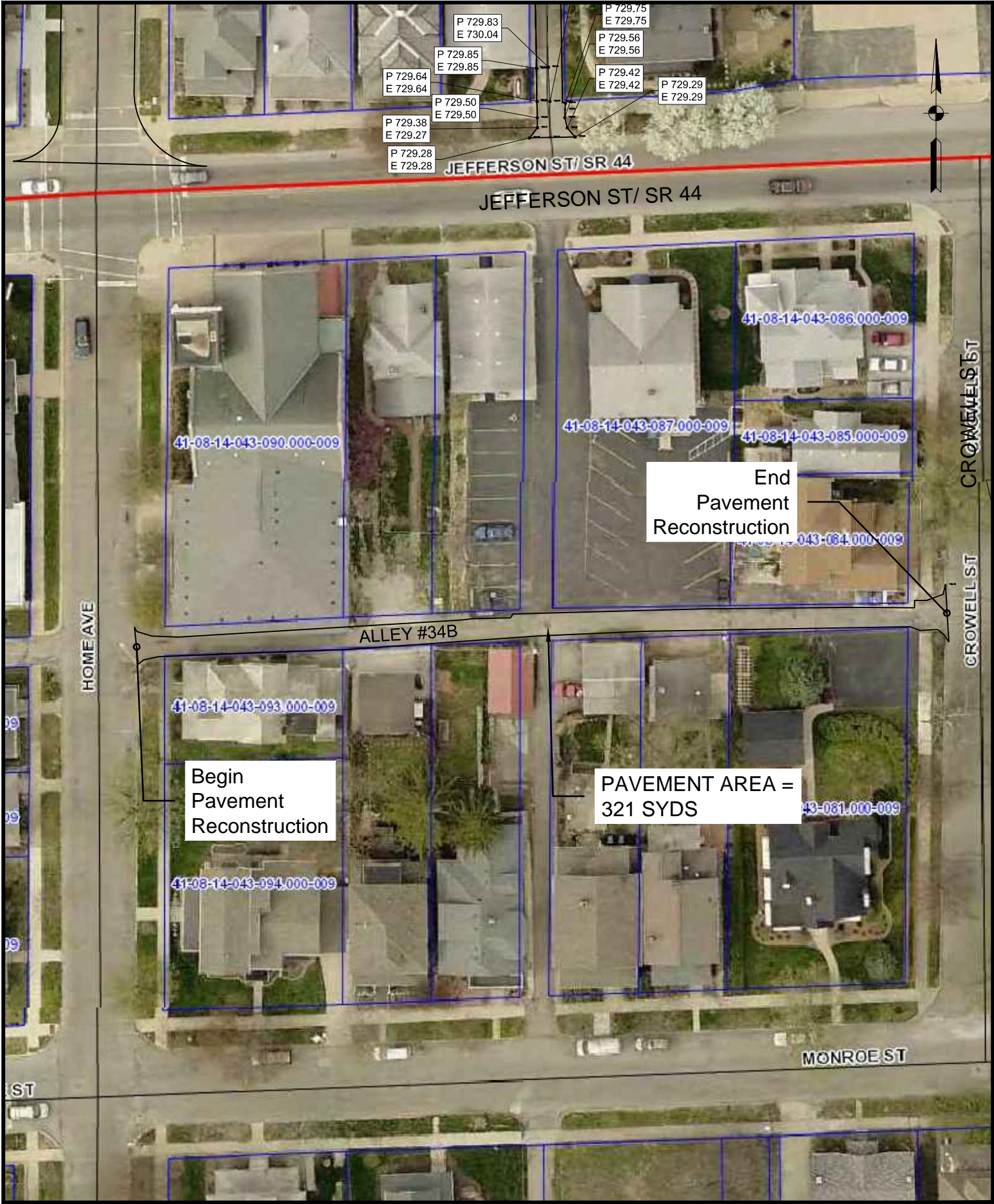
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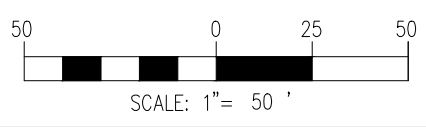
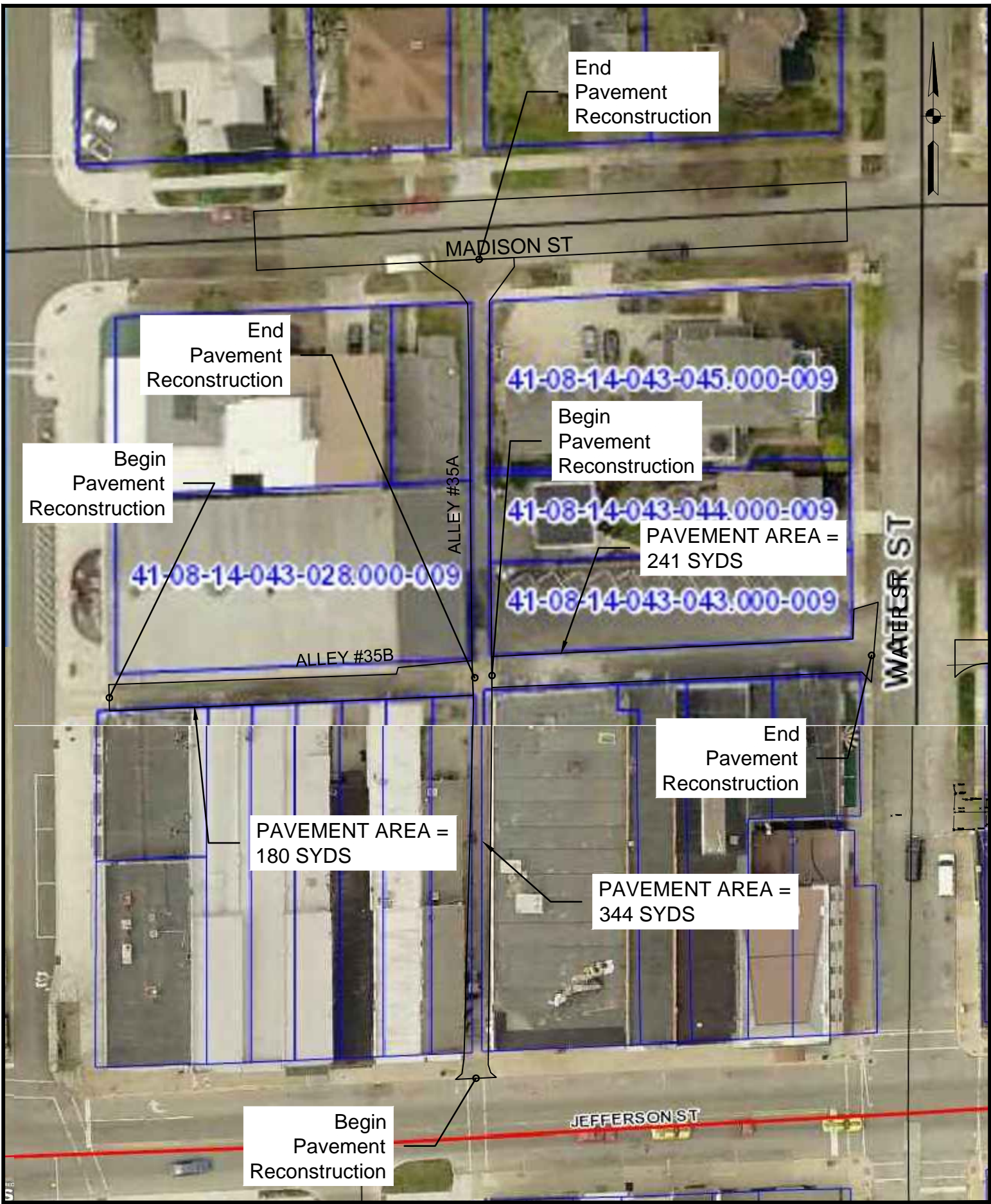
**CITY OF FRANKLIN**  
**2015 Maintenance Plan**  
 Alley Reconstruction

J:\7000 OTHERS\14-0042 Franklin Alleys\CADD\14-0042 FMA.dwg, Alleys (33), 5/15/2015 4:57:06 PM



**CITY OF FRANKLIN**  
**2015 Maintenance Plan**  
 Alley Reconstruction

J:\7000 OTHERS\14-0042 Franklin Alleys\CADD\14-0042 FMA.dwg, Alleys (34), 5/15/2015 4:57:09 PM



**CITY OF FRANKLIN**  
**2015 Maintenance Plan**  
 Alley Reconstruction

J:\7000 OTHERS\14-0042 Franklin Alleys\CADD\14-0042 FMA.dwg, Alleys (35), 5/15/2015 4:57:12 PM



MADISON ST

41-08-14-034-096.000-009

41-08-14-034-097.002-009

ALLEY #36B

JACKSON ST

End  
Pavement  
Reconstruction

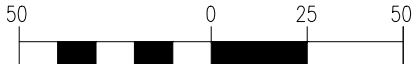
PAVEMENT AREA =  
165 SYDS

JEFFERSON ST/SR 44

50 ft

Begin  
Pavement  
Reconstruction

POWERED BY  
esri



SCALE: 1" = 50'



**CITY OF FRANKLIN**  
**2015 Maintenance Plan**

Alley Reconstruction

J:\7000 OTHERS\14-0042 Franklin Alleys\CADD\14-0042 FMA.dwg, Alleys (36), 5/15/2015 4:57:15 PM



Begin Pavement Mill and Resurface

HMA Patch 70'x11'

Mill & Resurface = 3694 SYDS

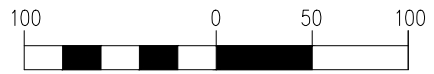
Begin Pavement Mill and Resurface

Mill & Resurface = 853 SYDS

End Pavement Mill and Resurface

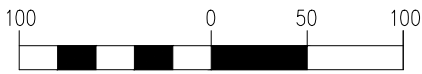
HMA Patch 80'x18'

HMA Patch 40'x4'



**CITY OF FRANKLIN**  
**2015 Maintenance Plan**  
 Street Milling, Patching and Overlay

J:\7000 OTHERS\14-0042 Franklin Alleys\CADD\14-0042 HMA.dwg, Streets (1), 5/15/2015 4:57:19 PM



SCALE: 1" = 100'



**CITY OF FRANKLIN**  
**2015 Maintenance Plan**  
 Street Milling, Patching and Overlay



End Pavement Mill  
and Resurface

Mill & Resurface =  
2199 SYDS

41-08-14-034-031.000-009

41-08-14-034-032.000-009

41-08-14-034-024.000-009

41-08-14-034-020.000-009

41-08-14-034-013.000-009

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41-08-14-034-082.010-000

41-08-14-034-086.000-009

41-08-14-034-087.010-000

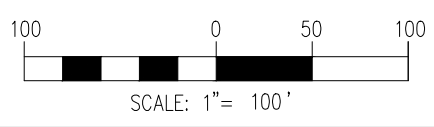
41-08-14-034-096.000-009

41-08-14-034-010.000-009

JEFFERSON ST/ SR 44

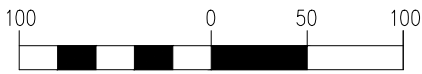
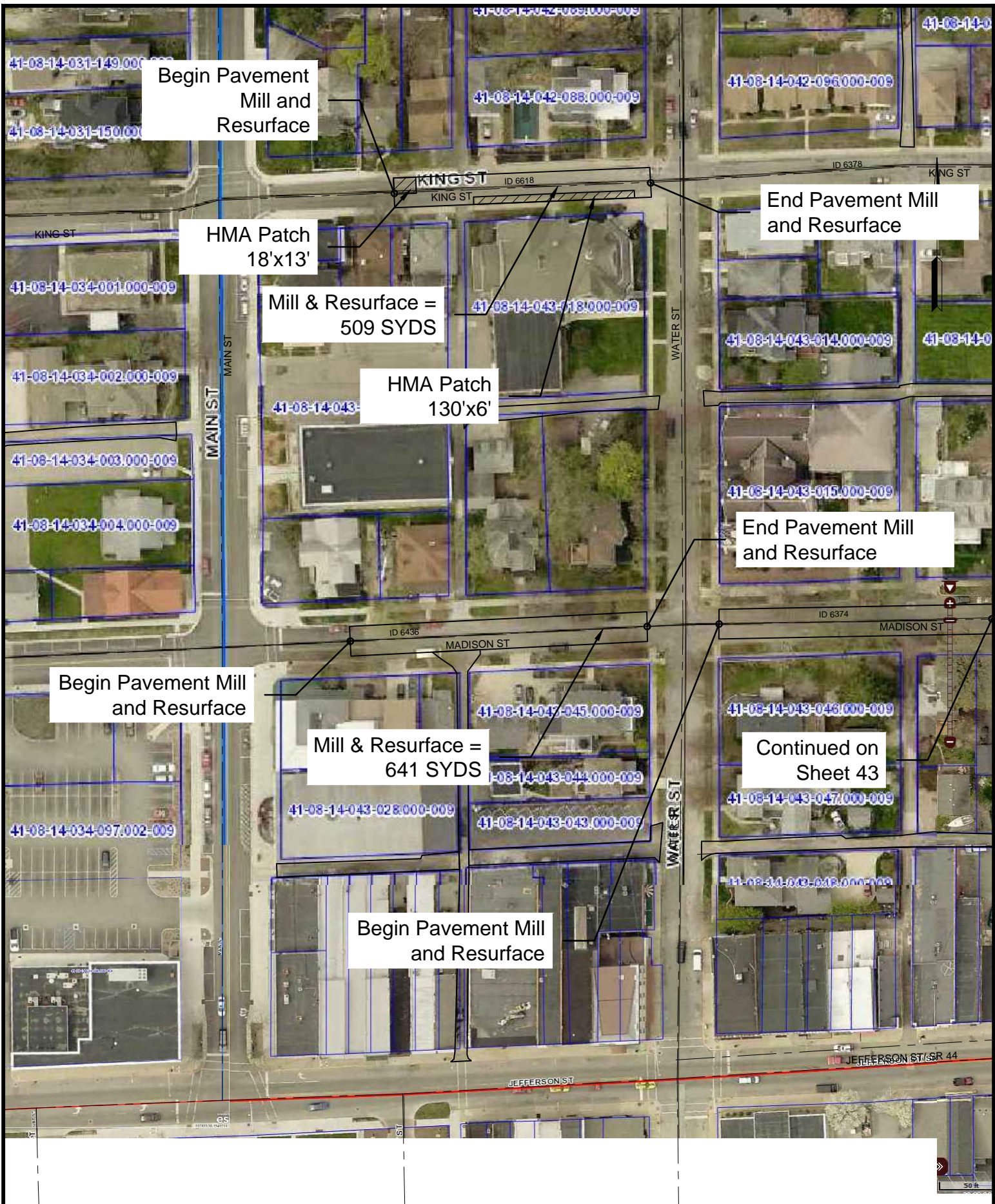
JEFFERSON ST/ SR 44

50 ft



**CITY OF FRANKLIN**  
**2015 Maintenance Plan**  
 Street Milling, Patching and Overlay

J:\7000 OTHERS\14-0042 Franklin Alleys\CADD\14-0042 FMA.dwg, Streets (3), 5/15/2015 4:57:23 PM



SCALE: 1" = 100'



**CITY OF FRANKLIN**  
**2015 Maintenance Plan**  
 Street Milling, Patching and Overlay





**CITY OF FRANKLIN**  
**2015 Maintenance Plan**  
 Street Milling, Patching and Overlay

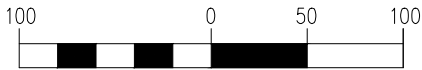
J:\7000 OTHERS\14-0042 Franklin Alleys\CADD\14-0042 HMA.dwg, Streets (5), 5/15/2015 4:57:27 PM



Begin Pavement  
Mill and Resurface

Mill & Resurface =  
1662 SYDS

End Pavement Mill  
and Resurface



SCALE: 1" = 100'



**CITY OF FRANKLIN**  
**2015 Maintenance Plan**  
 Street Milling, Patching and Overlay

Begin Pavement  
Mill and Resurface

MARTIN PL

OHIO ST

OHIO ST

JOHNSON AVE

CINCINNATI ST

RICHES ST

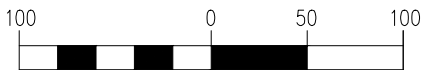
HMA Patch  
55'x6'

Mill & Resurface =  
976 SYDS

Intet, Adjust  
to Grade



End Pavement Mill  
and Resurface



SCALE: 1" = 100'



**CITY OF FRANKLIN**  
**2015 Maintenance Plan**  
Street Milling, Patching and Overlay

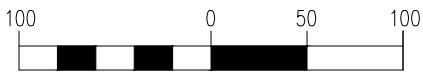


Begin Pavement  
Mill and Resurface

Mill & Resurface =  
2378 SYDS

End Pavement Mill  
and Resurface

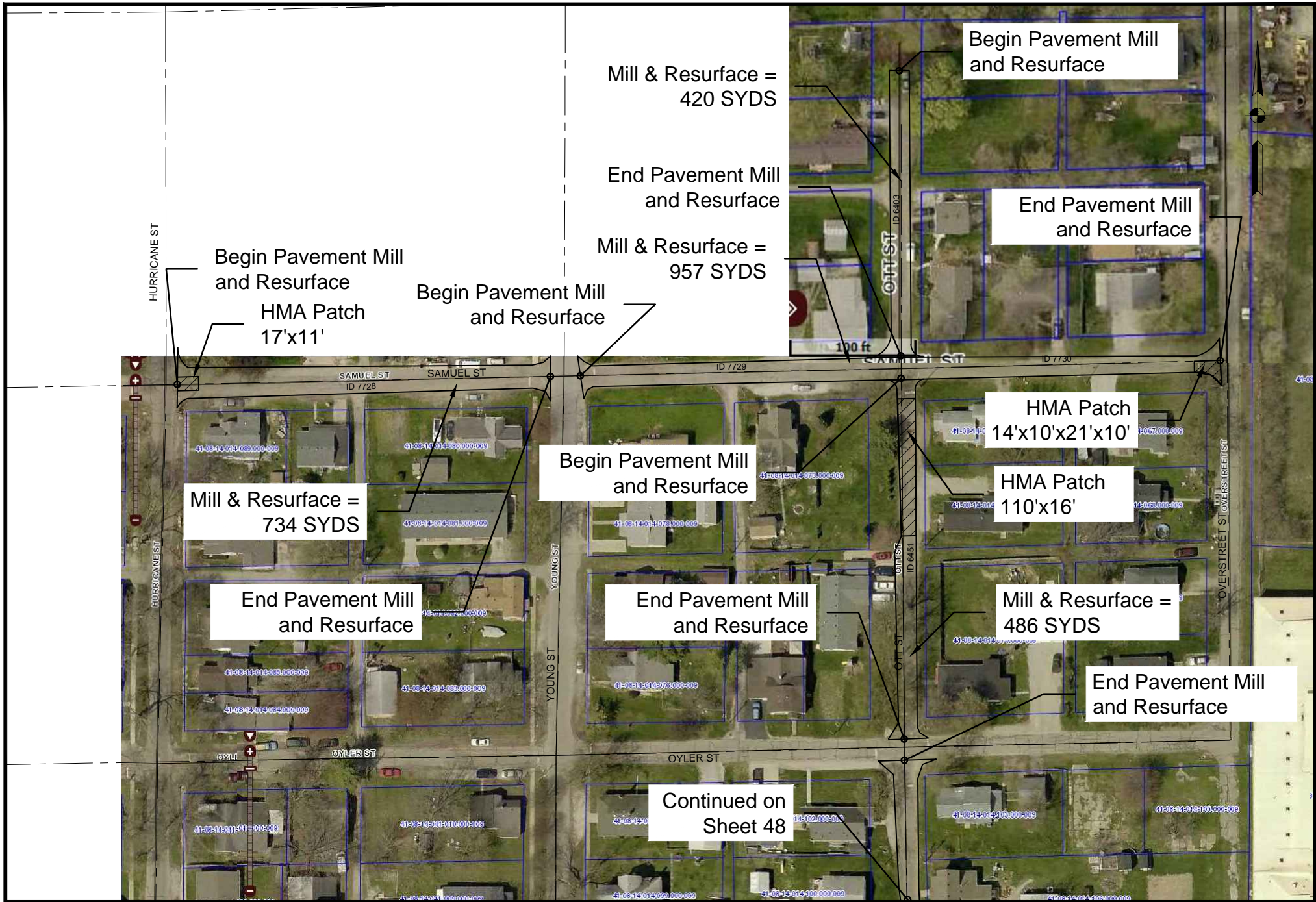
HMA Patch  
47'x10'



SCALE: 1" = 100'



**CITY OF FRANKLIN**  
**2015 Maintenance Plan**  
 Street Milling, Patching and Overlay



HURRICANE ST

Begin Pavement Mill and Resurface  
HMA Patch  
17'x11'

Begin Pavement Mill and Resurface

Mill & Resurface =  
420 SYDS

End Pavement Mill and Resurface

Mill & Resurface =  
957 SYDS

Begin Pavement Mill and Resurface

End Pavement Mill and Resurface

Mill & Resurface =  
734 SYDS

Begin Pavement Mill and Resurface

HMA Patch  
14'x10'x21'x10'

HMA Patch  
110'x16'

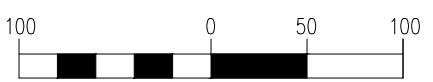
End Pavement Mill and Resurface

End Pavement Mill and Resurface

Mill & Resurface =  
486 SYDS

End Pavement Mill and Resurface

Continued on  
Sheet 48

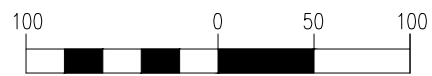


SCALE: 1" = 100'



**CITY OF FRANKLIN**  
**2015 Maintenance Plan**  
Street Milling, Patching and Overlay

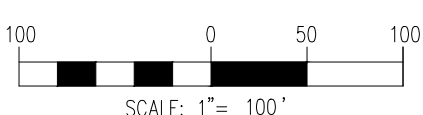
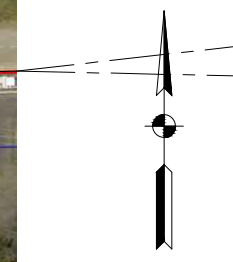




SCALE: 1" = 100'



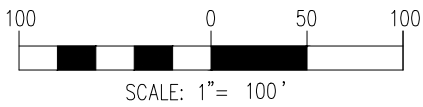
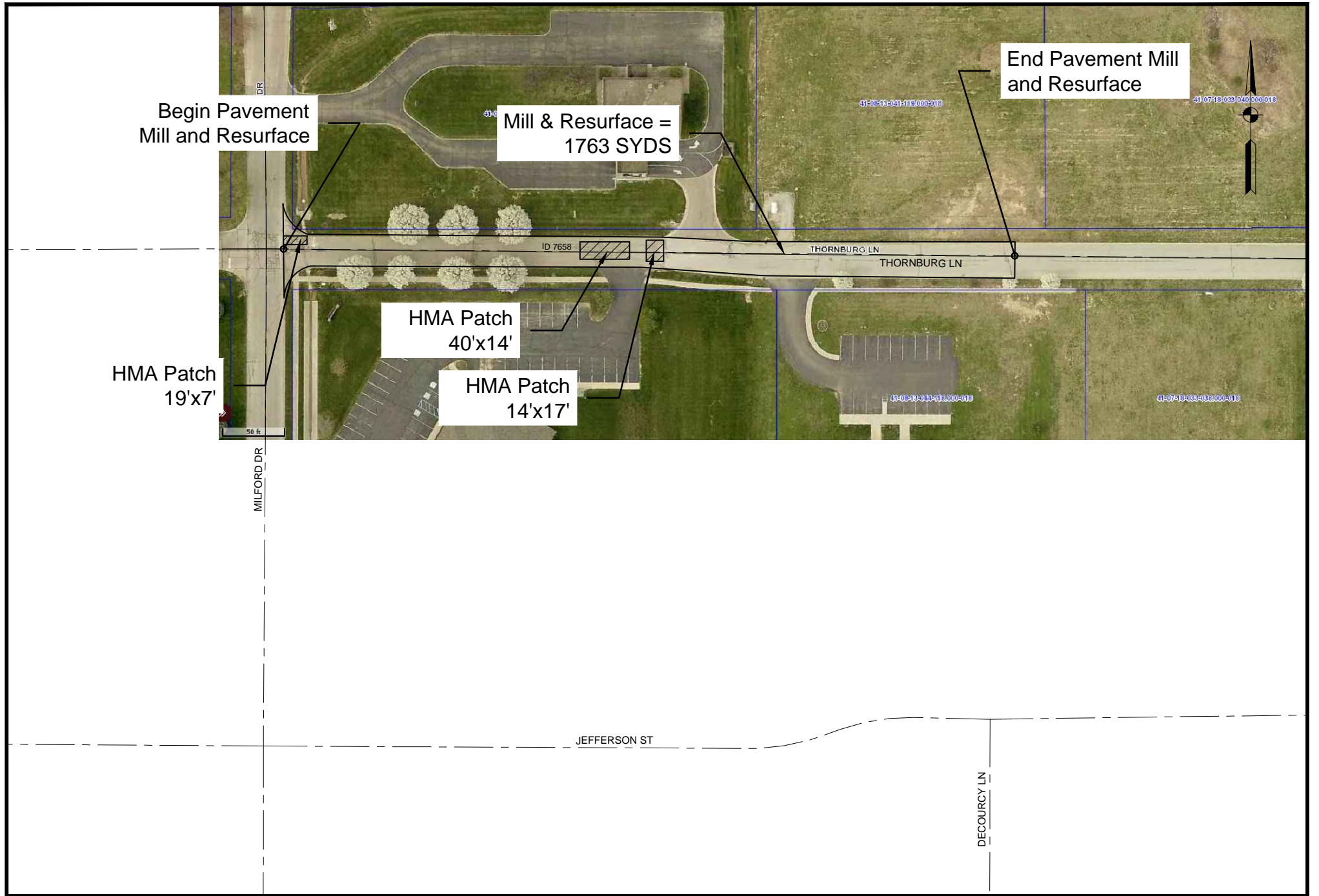
**CITY OF FRANKLIN**  
**2015 Maintenance Plan**  
 Street Milling, Patching and Overlay



**CITY OF FRANKLIN**  
**2015 Maintenance Plan**  
 Street Milling, Patching and Overlay

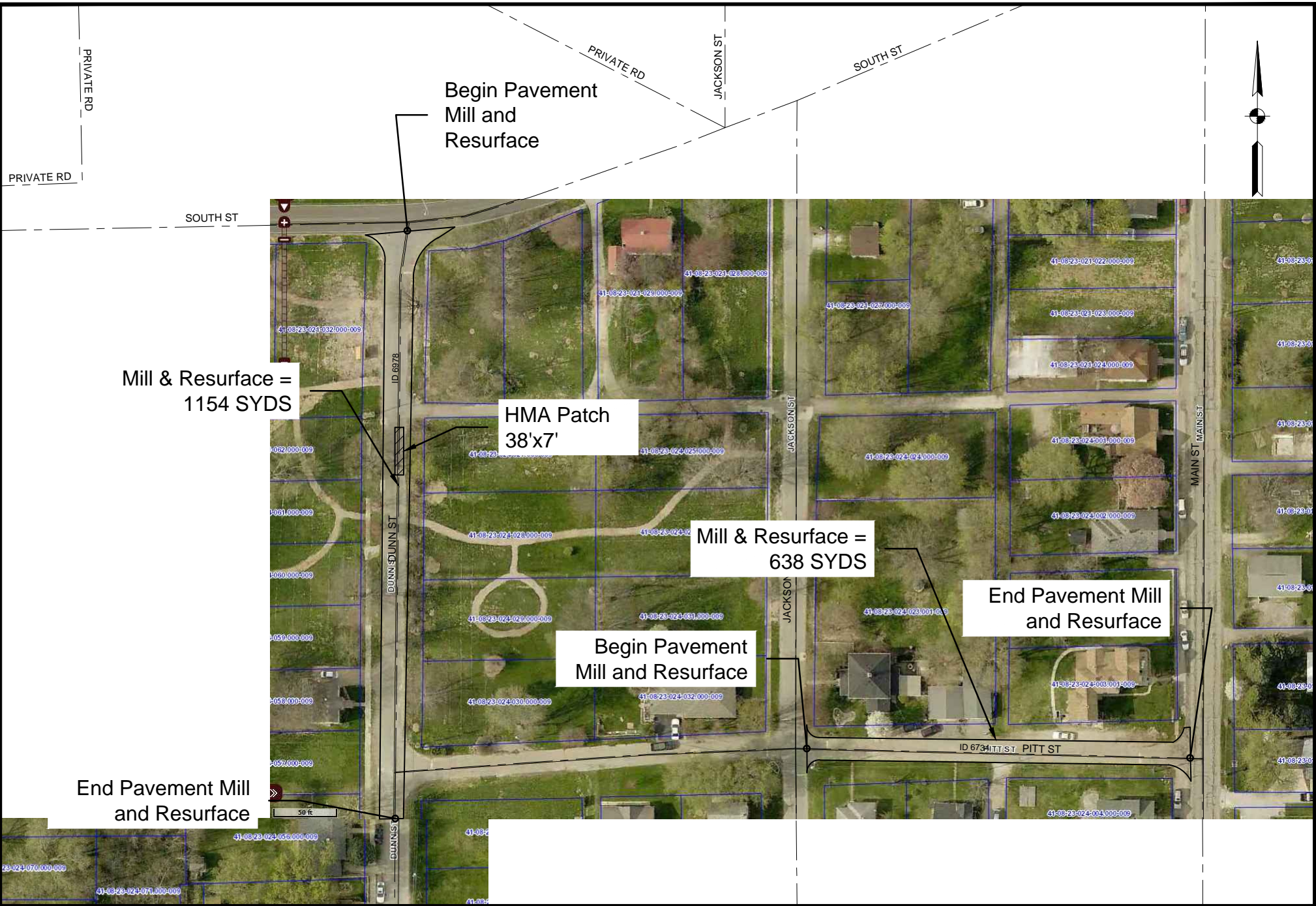
J:\7000 OTHERS\14-0042 Franklin Alleys\CADD\14-0042 HMA.dwg, Streets (12), 5/15/2015 4:57:44 PM





**CITY OF FRANKLIN**  
**2015 Maintenance Plan**  
 Street Milling, Patching and Overlay

J:\7000 OTHERS\14-0042 Franklin Alleys\CADD\14-0042 HMA.dwg, Streets (13), 5/15/2015 4:57:46 PM



**CITY OF FRANKLIN**  
**2015 Maintenance Plan**  
 Street Milling, Patching and Overlay

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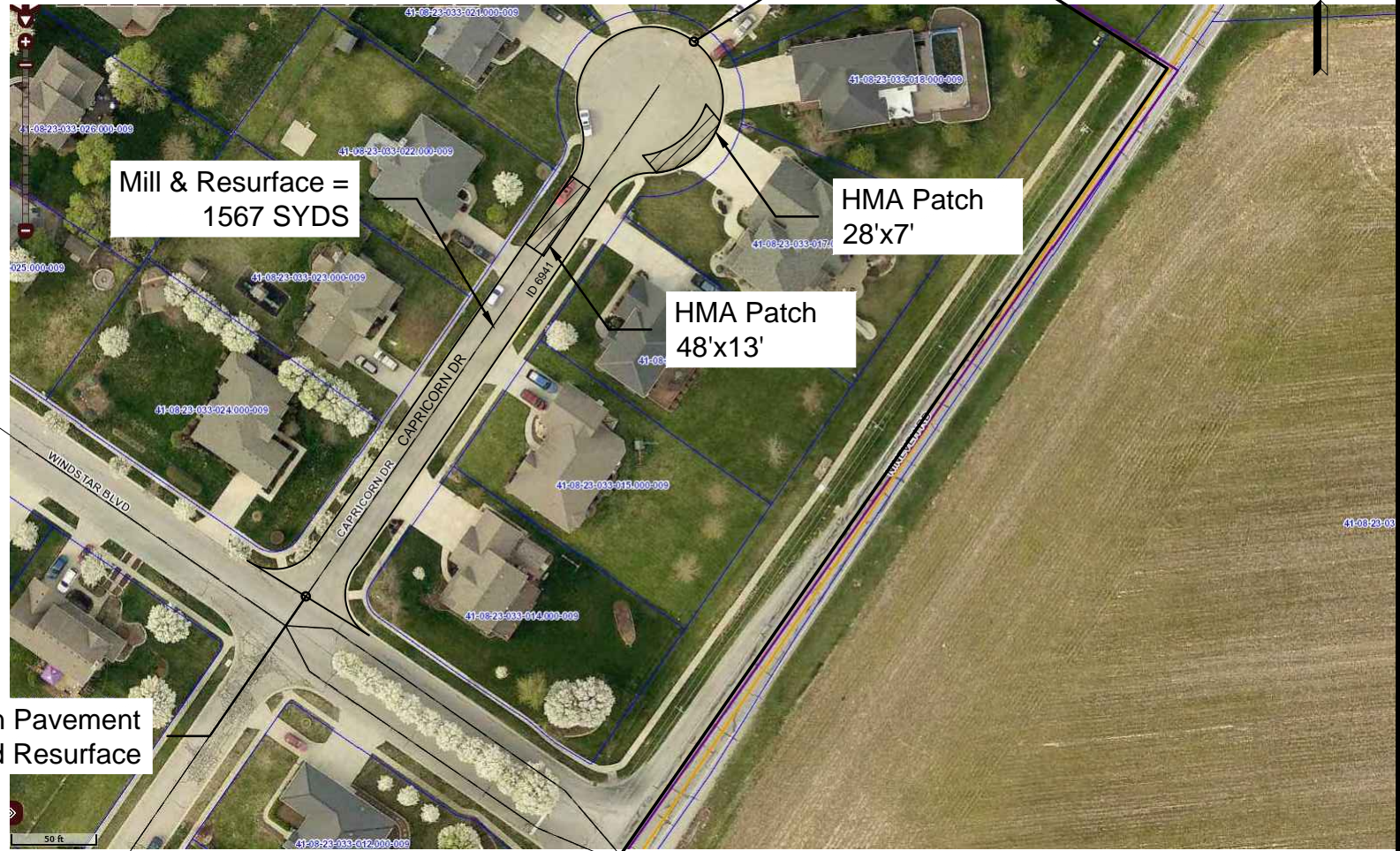


**CITY OF FRANKLIN**  
**2015 Maintenance Plan**  
 Street Milling, Patching and Overlay

J:\7000 OTHERS\14-0042 Franklin Alleys\CADD\14-0042 HMA.dwg, Streets (15), 5/15/2015 4:57:50 PM

NORTH SHORE BLVD

WINDSTAR BLVD



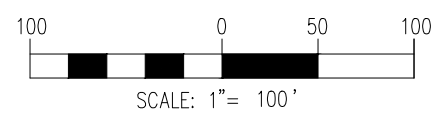
Mill & Resurface =  
1567 SYDS

HMA Patch  
28'x7'

HMA Patch  
48'x13'

Begin Pavement  
Mill and Resurface

End Pavement Mill  
and Resurface



**CITY OF FRANKLIN**  
**2015 Maintenance Plan**  
 Street Milling, Patching and Overlay

Continued  
on Page 56

HMA Patch  
40'x10'

Continued  
From Page 40

BANTA ST

MAPLE LN

BANTA ST

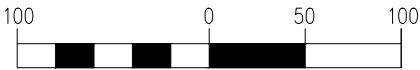
ADAMS ST

ADAMS ST

WEST ST  
WEST ST

WALNUT ST  
WALNUT ST

WALNUT ST



SCALE: 1" = 100'



# CITY OF FRANKLIN 2015 Maintenance Plan Street Milling, Patching and Overlay

J:\7000 OTHERS\14-0042 Franklin Alleys\CADD\14-0042 HMA.dwg, Streets (17), 5/15/2015 4:57:55 PM

End Pavement Mill and Resurface

Continued on Page 57

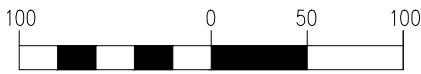
Begin Pavement Mill and Resurface

HMA Patch 47'x10'

Mill & Resurface = 679 SYDS

HMA Patch 50'x24'

Continued From Page 55



SCALE: 1" = 100'



# CITY OF FRANKLIN 2015 Maintenance Plan Street Milling, Patching and Overlay

J:\7000 OTHERS\14-0042 Franklin Alleys\CADD\14-0042 HMA.dwg, Streets (18), 5/15/2015 4:57:57 PM



CLARK ST

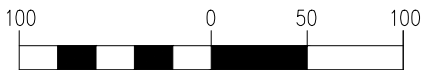
OLIVER AVE



Begin Mill and Resurface

Mill & Resurface = 8548 SYDS

Continued From Page 56



SCALE: 1" = 100'



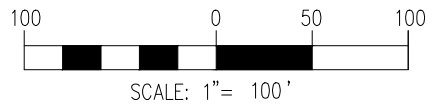
# CITY OF FRANKLIN 2015 Maintenance Plan Street Milling, Patching and Overlay

Continued on Sheet 60



Mill, Place Glasgrid, & Resurface = 3935 SYDS

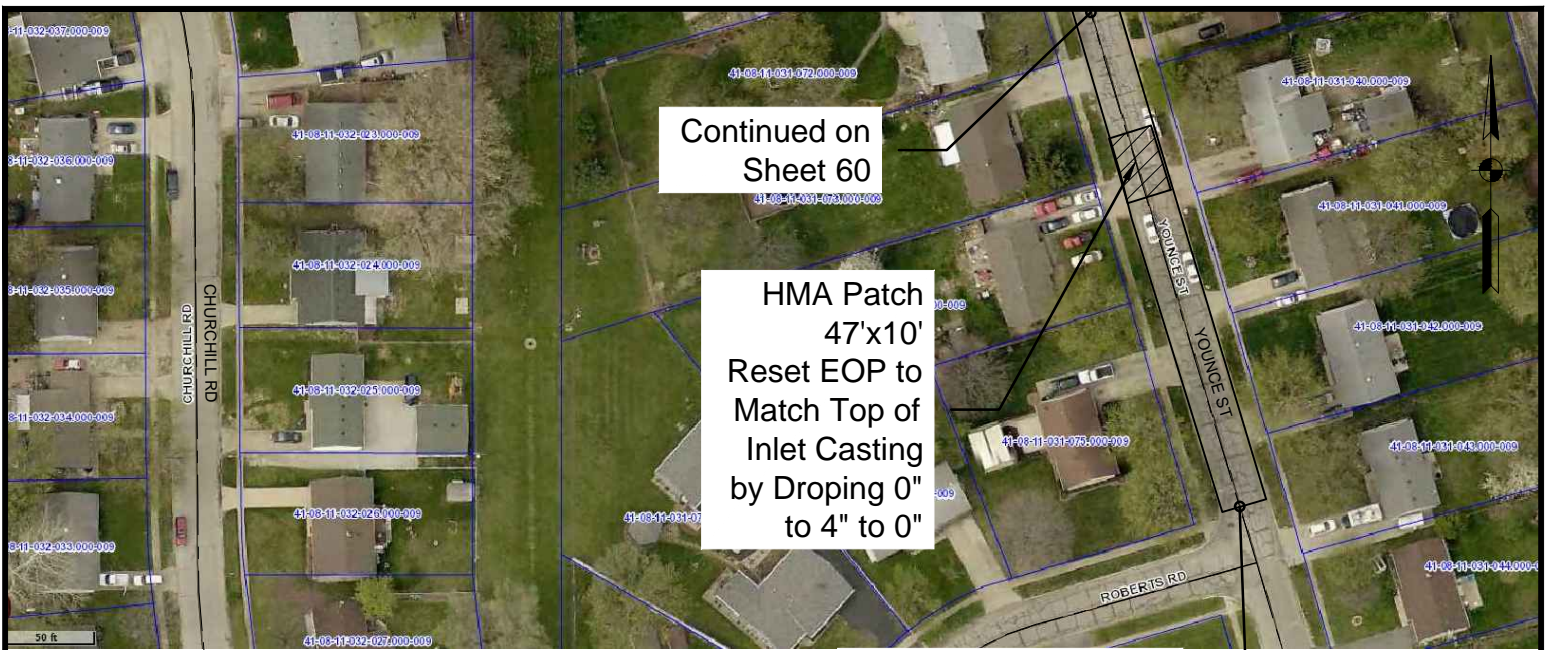
Continued on Sheet 58



# CITY OF FRANKLIN 2015 Maintenance Plan Street Milling, Patching and Overlay

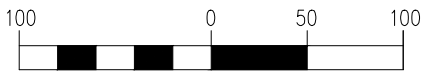
J:\7000 OTHERS\14-0042 Franklin Alleys\CADD\14-0042 FMA.dwg, Streets (21), 5/15/2015 4:58:01 PM





End Pavement Mill,  
Glassgid, and  
Resurface

End Pavement Mill,  
Glassgrid, and  
Resurface



SCALE: 1" = 100'



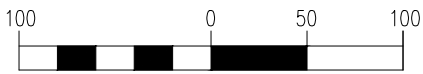
**CITY OF FRANKLIN**  
**2015 Maintenance Plan**  
 Street Milling, Patching and Overlay



Begin Pavement Milling,  
Glassgrid and Overlay

Mill, Place Glassgrid, & Resurface =  
2392 SYDS

Continued on  
Sheet 59



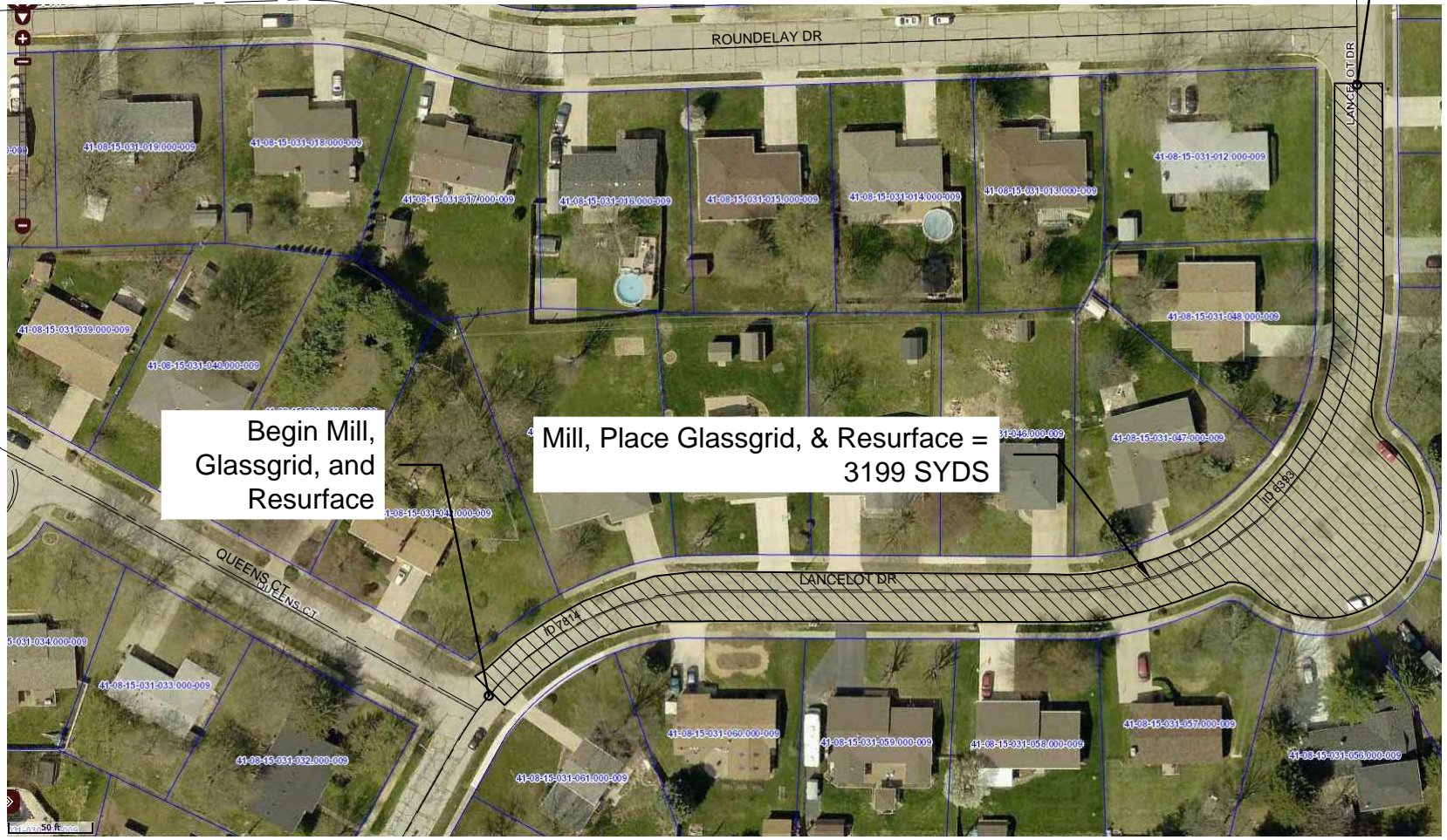
SCALE: 1" = 100'



**CITY OF FRANKLIN**  
**2015 Maintenance Plan**  
Street Milling, Patching and Overlay

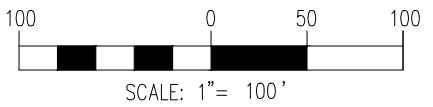


End Mill,  
Glasgrid, and  
Resurface

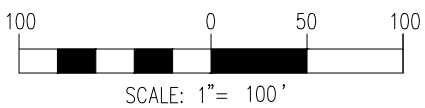
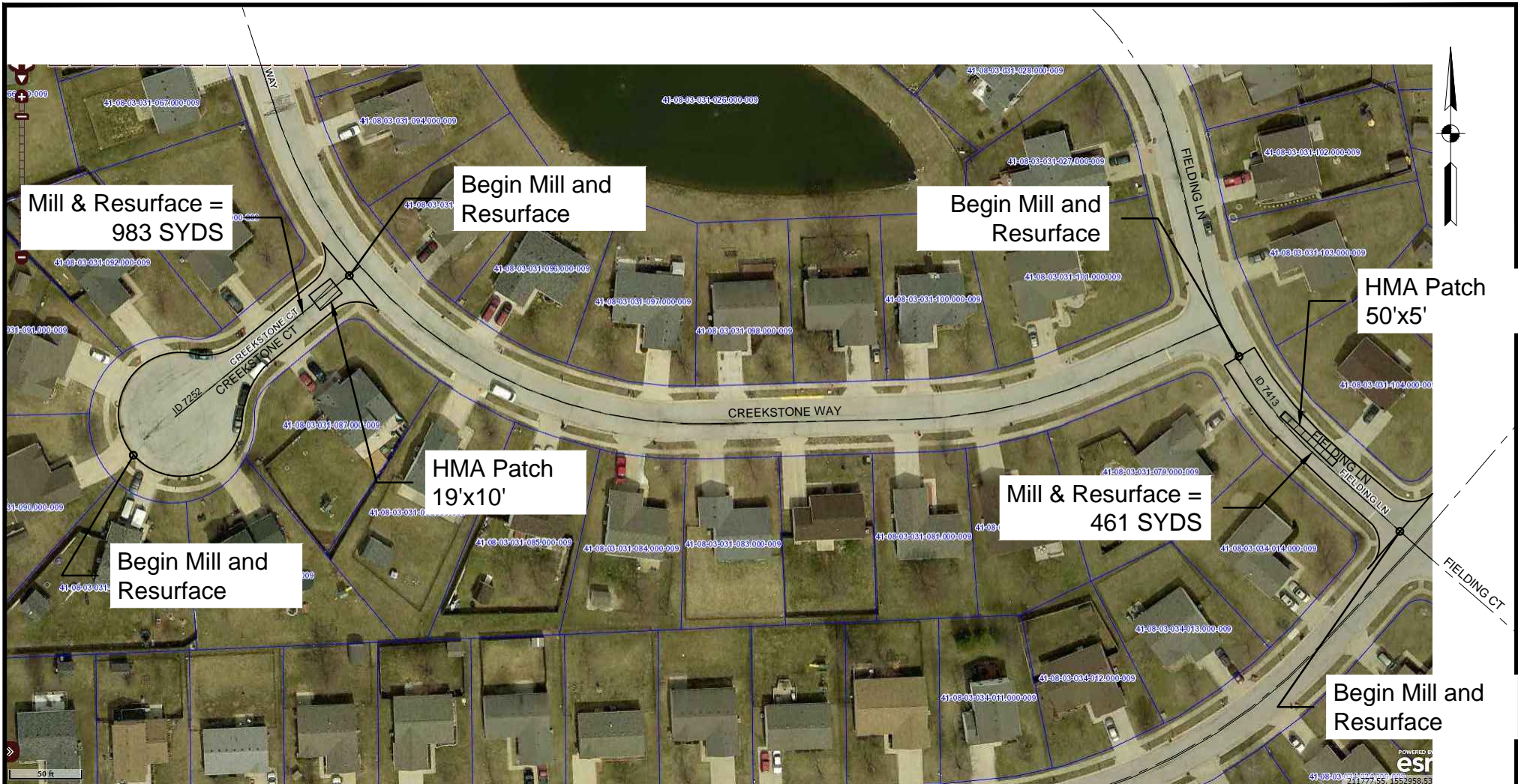


Begin Mill,  
Glassgrid, and  
Resurface

Mill, Place Glassgrid, & Resurface =  
3199 SYDS



**CITY OF FRANKLIN**  
**2015 Maintenance Plan**  
 Street Milling, Patching and Overlay



**CITY OF FRANKLIN**  
**2015 Maintenance Plan**  
 Street Milling, Patching and Overlay



Begin Mill and Resurface

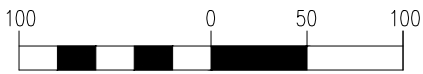
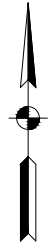
HMA Patch  
208'x18'

Mill & Resurface =  
1438 SYDS

Begin HMA  
Patch

HMA Patch  
94'x22' =  
230 SYDS

End HMA  
Patch



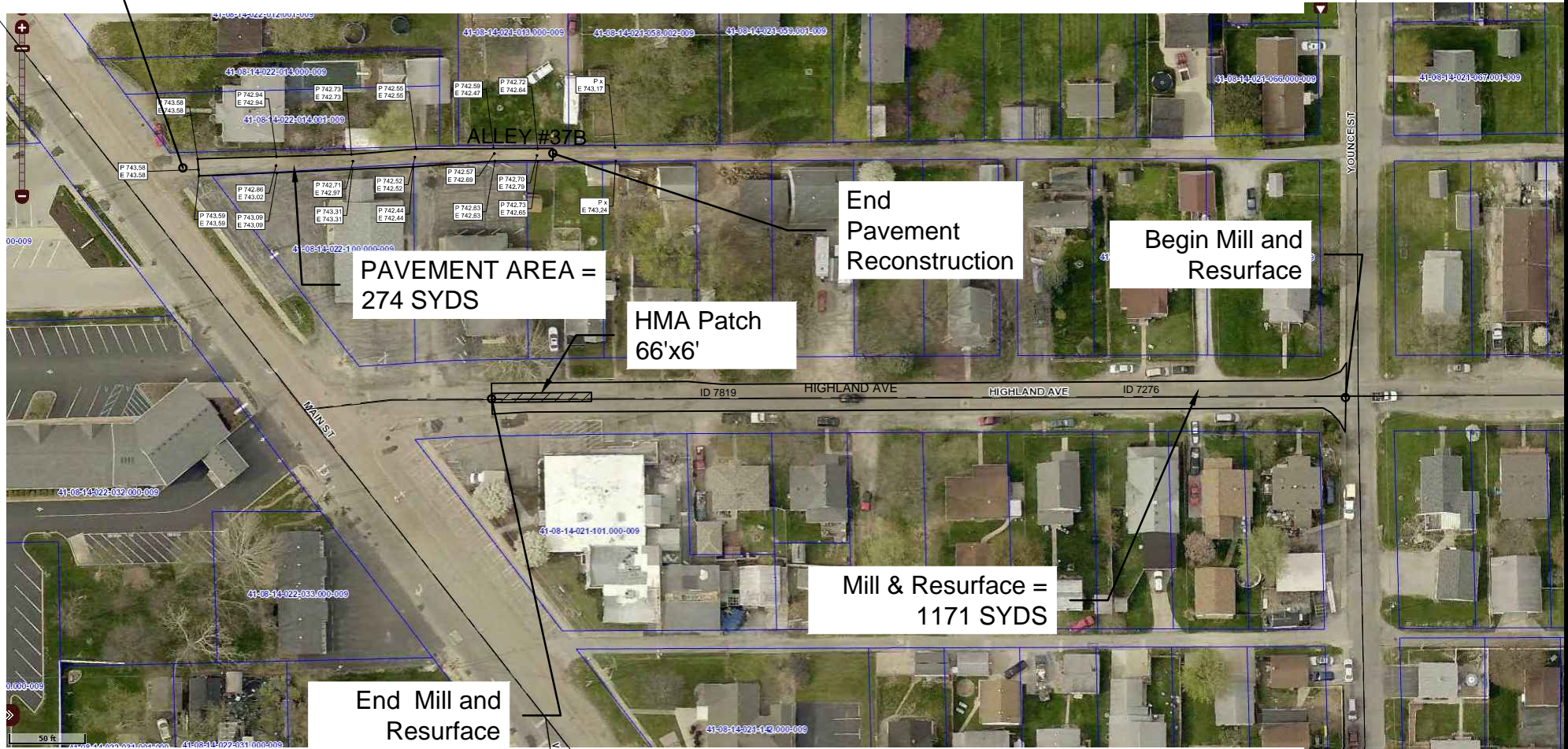
SCALE: 1" = 100'



**CITY OF FRANKLIN**  
**2015 Maintenance Plan**  
 Street Milling, Patching and Overlay



Begin  
Pavement  
Reconstruction



PAVEMENT AREA =  
274 SYDS

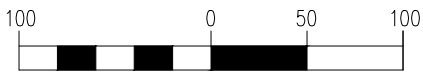
HMA Patch  
66'x6'

End  
Pavement  
Reconstruction

Begin Mill and  
Resurface

Mill & Resurface =  
1171 SYDS

End Mill and  
Resurface



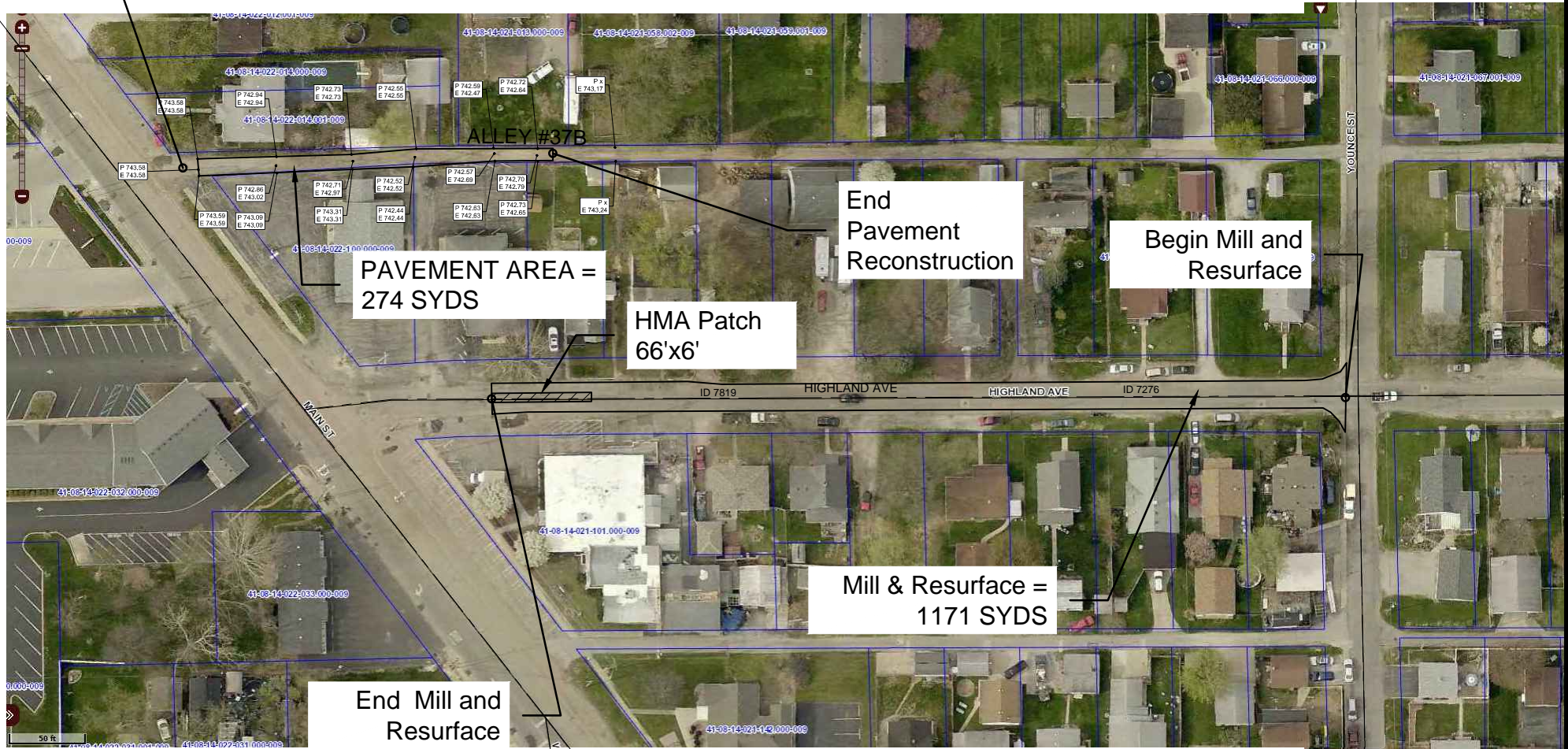
SCALE: 1" = 100'



**CITY OF FRANKLIN**  
**2015 Maintenance Plan**  
Street Milling, Patching and Overlay



Begin  
Pavement  
Reconstruction



PAVEMENT AREA =  
274 SYDS

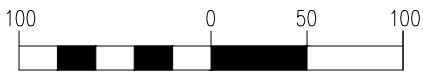
HMA Patch  
66'x6'

End  
Pavement  
Reconstruction

Begin Mill and  
Resurface

Mill & Resurface =  
1171 SYDS

End Mill and  
Resurface

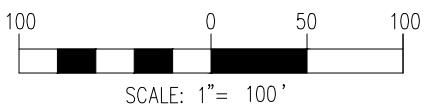
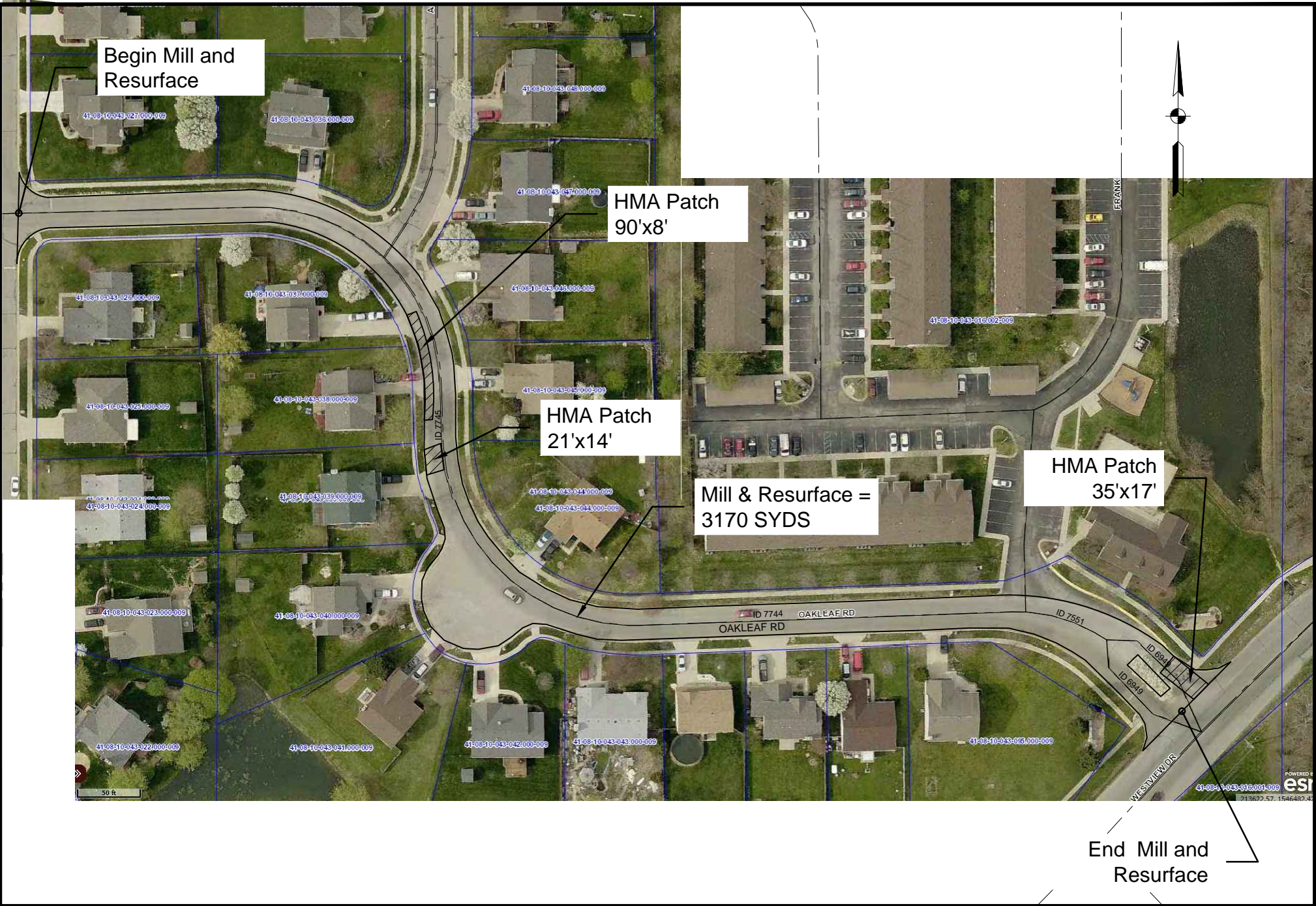


SCALE: 1" = 100'



**CITY OF FRANKLIN**  
**2015 Maintenance Plan**  
Street Milling, Patching and Overlay

J:\7000 OTHERS\14-0042 Franklin Alleys\CADD\14-0042 HMA.dwg, Streets (27), 5/15/2015 4:58:14 PM



**CITY OF FRANKLIN**  
**2015 Maintenance Plan**  
 Street Milling, Patching and Overlay



BRANIGIN RD

U.S. 31 MORTON ST

U.S. 31 MORTON ST

AREA 3A - 3409 SYDS  
3" MILLING WITH  
3" HMA OVERLAY  
AREA

AREA 2 - 3637 SYDS  
3" MILLING WITH  
3" HMA OVERLAY  
AREA

AREA 3B - 1244 SYDS  
3" MILLING WITH  
3" HMA OVERLAY  
AREA

41-08-03-042-055.001-009

24' x 11.5' HMA Patch

9' x 11.5' HMA Patch

88' x 15' HMA Patch

85' x 34' HMA Patch

AREA 1 - 4104 SYD  
MILLING & OVERLAY  
AREA

15' x 4' HMA Patch

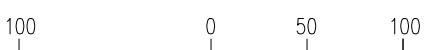
47' x 18' HMA Patch

89' x 16' HMA Patch

(EX. CONC.)  
GOOD COND  
INDUSTRIAL DR

25' x 30' HMA Patch

48' x 4.5' HMA Patch



SCALE: 1" = 100'



# CITY OF FRANKLIN 2015 Maintenance Plan

## Parking Lot Milling, Patching and Overlay



**CITY OF FRANKLIN**  
**2015 Maintenance Plan**  
 Parking Lot Milling, Patching and Overlay

J:\7000 OTHERS\14-0042 Franklin Alleys\CADD\14-0042 HMA.dwg, Parking Lot (2), 5/15/2015 4:58:21 PM