EXHIBIT "I"

SCOPE OF SERVICES

This scope of services is intended to be an accurate description of the items and tasks required for completion of the design of this project. However, each project is unique and may require effort in an individual task to complete the design. The following information will explain and define in general terms the major design items of importance relating to this project. All the elements of work that are necessary to satisfactorily complete the design of this project may or may not be listed. The lack of a specific listing of an element or item in the scope of services does not in itself constitute the basis for additional services, supplemental agreements, and/or adjustment in compensation.

A more detailed description of the process and requirements used by MoDOT for completion of the design may be found in the EPG. The consultant is encouraged to review the appropriate sections of the manual to supplement the information contained in the scope of services and provide additional guidance in the requirements and expectations of MoDOT for completion of the design services.

Services rendered by the CONSULTANT, which are considered additional services, will be addressed under a supplemental agreement. The provisions of the Design Consultant Agreement outlining the responsibilities of the CONSULTANT regarding the quality and accuracy of the deliverables and products shall apply to any decisions regarding determinations of additional services.

Preparation of a supplemental agreement is necessary prior to performance of any work, which is considered as additional services, not included in the original scope of services. The consultant will not be compensated for additional services performed prior to execution of a supplemental agreement. Only additional services, which are required due to changed or unforeseen conditions or are due to a change in the specified deliverable, will be considered for inclusion in a supplemental agreement.

The CONSULTANT will provide the professional, technical, and other personnel resources, equipment, materials and all other things necessary to prepare the preliminary plans, right of way plans, and construction plans and data required for development of this specific project. The survey data shall be based on the Missouri State plane coordinate system and modified by a factor approved by the COMMISSION. All elevations and vertical control shall be based on NAVD 88.

The CONSULTANT shall prepare all plans through use of a Computer Aided Drafting (CAD) program. The CONSULTANT shall conform to the Missouri Department of Transportation

Specifications for Computer Deliverable Contract Plans as referenced in the EPG. Unless otherwise specified all plan sheets and CAD plots shall be electronically delivered to the COMMISSION as 22-inch by 34-inch sheets and shall conform to the Specifications for Computer Deliverable Contract Plans.

The CONSULTANT will be required to produce and update the construction cost estimate for this project at the completion of each major milestone or at a minimum of every six months. The major milestones for this project are defined as the preliminary design, right of way design (if necessary), and final design. The CONSULTANT shall review "as built" plans, aerial photographs, manuscripts, etc. and other information to be provided by the Commission and make the necessary field investigations to assure that there have been no significant changes since the information was recorded or obtained.

The CONSULTANT shall provide the professional, technical and other personnel resources, equipment, materials and all other things necessary to prepare the preliminary plans, Right of Way plans, and construction plans for the bridge improvements.

The consultant shall perform the following services, all in accordance with the standard practice of the Commission and the following:

AASHTO “A Policy on Geometric Design of Highways and Streets” (latest version)

AASHTO “Roadside Design Guide” (latest version)

AASHTO “LRFD Design methods” (latest version)

AASHTO “Highway Drainage Guidelines” (latest version)

“Manual on Uniform Traffic Control Devices” (latest version)

“Highway Capacity Manual” (latest version)

I Administration

CONSULTANT shall participate in the following as part of the Administration tasks:

1. Attend and document milestone project meetings with MoDOT (CORE Team meetings). Meetings can be held virtually.
2. Correspondence (emails, letters, meeting minutes, phone calls)
3. Set up the project and conduct Kick-Off Meeting.

4. Coordination with subconsultants.

5. Participate in one Public Meeting. Develop handouts and exhibits for meeting.

6. Provide monthly progress reports and invoices and review subconsultants invoices and reports.

7. Provide exhibits, sketches, and back-up data to MoDOT on an as-needed basis.

8. Provide information to support the SE District MoDOT staff in maintaining a public website for the project staff to inform the public and update impacts related to the project including timelines, changes to the project, meetings, comments. The website to be maintained through the construction phase.

II Surveys

CONSULTANT shall obtain topographic survey information required for the preparation of preliminary, right of way, and final roadway plans including:

1. Perform a thorough review of any existing surveys.

2. Coordinate available survey control and benchmarks with surveyors.

    a. Translate control and benchmarks into sheet drawings to be used in construction plans, per EPG.

3. Complete remaining topographic surveys to develop preliminary plans, bridge survey, right-of-way plans and final roadway plans, including all improvements and existing topography within the limits of the project. Topographic surveys shall consist of all pertinent topographic features including, but not limited to:

    a. existing drainage and sanitary structures (pipes, types, flowlines, sizes)

    b. trees over 4 inches in diameter

    c. additional existing retaining wall shots and type of wall

    d. building front elevations and pertinent building features

    e. pertinent parking lot features

    f. driveway joints, pavement types and profiles

    g. existing signal equipment surveys

    h. drainage swales

    i. sign posts, size, identification and photo log

    j. pavement marking type

k. miscellaneous roadside identification and photo log

l. lighting

m. other

4. Field locate visible above ground evidence of utilities located within the project area. “Missouri One Call” and MoDOT will be contacted and a formal request will be submitted for marking the locations of member utilities. In the event that “Missouri One Call” fails to respond, in whole or in part, to the formal request, underground facilities, structures, and utilities will be plotted from surveys and/or available records. The locations of all utilities are to be considered approximate. There may be other utilities, whose existence may not be known at the time of the survey.

5. Coordinate with District Utility Engineer on underground utility one-call locates and have utilities located in identified areas of proposed project.

6. Complete utilities survey and verify completeness and accuracy of utility topographical survey.

7. As-needed punch list surveys due to design updates and/or new development.

CONSULTANT shall perform right-of-way surveys necessary for the preparation of preliminary, right of way and final roadway plans including:

1. Identify at the earliest opportunity, the title reports to be ordered by the COMMISSION. This will be coordinated during the preliminary design phase of the project.

2. Locate existing right of way, property lines and pertinent section lines for the entire project limits.

3. Clearly identify linework in drawing with text (i.e. property lines (PL), section lines, quarter-quarter section lines, existing right-of-way, existing easements, etc.

4. Research impacted parcels. Each of these properties within the project limits shall include property owner name, assessor’s map number, last deed book and page, and existing size of parcel in square feet.

5. All property lines shall have a bearing (to the nearest second) and a length (to the nearest hundredth of a foot) shown and the parcel closed within acceptable tolerances governed by the State of Missouri.

6. Incorporate all easements and identified information from the title work into the existing right-of-way drawing.

7. Provide a reference tie drawing with three-point ties.

8. Establish land corner ties.

9. If necessary, the CONSULTANT shall provide a land survey plat that is compliant with the current standards for property boundary surveys to be recorded. The CONSULTANT shall also provide survey plats and legal descriptions as defined in Section 236.4.6 of MoDOT's Engineering Policy Guide.

III Utility Coordination

The CONSULTANT shall perform the following utility coordination tasks:

1. Obtain maps from utilities of their known locations and adjust survey limits as needed.

2. Coordinate submittal of preliminary plans to utility companies.

3. Coordinate with utility companies on the development of the plan of adjustment and obtain cost estimates for reimbursable utilities for the District Utility Engineer's approval.

4. Show the existing utility facilities and plan of adjustments for proposed utilities facilities in the contract plans. (plans sheets, cross sections, culvert sections)

5. Coordinate with utility owner the relocation of each impacted utility on the project during design and construction.

6. Prepare special utility sheets as necessary (including utility profile and exhibits).

7. Assist District Utility Engineer in the preparation of agreements (includes municipal agreements).

8. Identify locations for power service needs, prepare service request for submittal and coordinate with the power company to obtain estimated costs.

9. Coordinate with MoDOT (PM and District Utility Engineer) and to provide SUE test hole information at critical utility locations.

10. Prepare utility job special provision and information for the preparation of the Utility Status Letter for District Utility Engineer.

11. Provide assistance and answer utility related questions during the construction phase for MoDOT staff and the roadway contractor.

IV Concept Report

1. The CONSULTANT will collect traffic data, including pedestrians, for the study area.

2. Alternatives Development
    a. The CONSULTANT will develop alternatives for lane widths, shoulder widths, and turn lane lengths and locations.
        i. Establish horizontal and vertical geometry of alternatives
        ii. Establish typical section of alternatives
        iii. Estimate area of any R/W needed of alternatives
        iv. Identify potential design exceptions that may be required
        v. Review drainage per Alternative
        vi. Review potential utility impacts per Alternative
        vii. Evaluate constructability of the alternatives

3. Traffic Safety and Operational Analyses

    a. The CONSULTANT shall perform the following tasks:
        i. Conduct a safety analysis utilizing methods described within the latest edition of the Highway Safety Manual (HSM).
        ii. Safety Analysis (Existing Condition)
        iii. Safety Analysis (Selected proposed alternative)
        iv. Conduct an operational analysis of existing condition and proposed two alternatives.
        v. Prepare conceptual signing plan for the recommended alternative configuration.

4. Concept Report

    a. The CONSULTANT will prepare a written draft summarizing the findings of Geometric Concepts, Safety and Operational Analyses, and Cost Analysis.
    b. The CONSULTANT will develop a conceptual opinion of probable construction cost for each alternative using current year bid tabulations to formulate an order of magnitude cost for each alternative.
    c. The CONSULTANT will submit an electronic copy of the draft report to MoDOT for review of the proposed recommendations and will finalize the report based on MoDOT comments and/or concurrence.

V Public Involvement Support

The COMMISSION will be the main point of contact for receiving calls from the public. The CONSULTANT will interact with external agencies and the county commission as required to accomplish the scope of services of this contract.

1. The CONSULTANT shall be required to attend meetings with regulatory agencies, organizations, county officials, local municipalities, property owners and other entities as

required. A total of three (3) stakeholder meetings, with various entities, is anticipated for the public involvement on this project.

2. The CONSULTANT shall participate in a planning meeting with MoDOT prior to the public meeting. A total of one (1) public meeting is anticipated to be held during the preliminary design phase. If additional public meetings are required, the COMMISSION will request via a Supplemental Agreement.
3. The CONSULTANT shall provide the COMMISSION a database containing all property owners contiguous to the project area, or within a reasonable distance of the project. The database shall provide contact information available for public involvement and environmental purposes (e.g. mailing addresses, phone numbers, email addresses, etc.) The database shall also designate whether the individual is someone the Commission will need to obtain right of way and/or easements from.
4. The COMMISSION shall advertise for meetings, obtain the meeting location and room and perform mass mailings of notices of meetings or hearings, and newsletters.
5. The CONSULTANT shall prepare the exhibits as requested by COMMISSION for the public meeting or hearing. Assume 2 plan view mounted board exhibits.
6. The CONSULTANT shall produce copies of the handouts.
7. The COMMISSION shall provide the sign-in sheet/equipment and personnel for the sign-in table at each public meeting.
8. The CONSULTANT shall record and prepare the meeting minutes of the public meeting and shall prepare the transcript, if applicable.

VI Preliminary Roadway Design

The CONSULTANT'S attention is directed to Chapter 235 of the MoDOT Engineering Policy Guide (EPG) for general guidelines and requirements for preliminary design. Other chapters may be applicable for preliminary design preparation.

1. Upon approval of the design criteria memorandum by COMMISSION, the CONSULTANT shall undertake the following to develop the preliminary design phase:

    a. Prepare preliminary plans, as outlined in the MoDOT EPG.
        i. The COMMISSION shall furnish the CONSULTANT traffic information for the construction and design years to be used in the preliminary plans.
        ii. The COMMISSION shall furnish the CONSULTANT the latest accident data and traffic information used to calculate the project accident rate. The COMMISSION shall furnish the CONSULTANT the "statewide accident rate for a similar class of roadway" and any high hazard locations within the project limits.
        iii. The CONSULTANT shall submit the preliminary plans to the COMMISSION for review and approval as shown in Exhibit IV.

b. The preliminary plans shall be prepared in accordance with the applicable sections of the MoDOT EPG, as to what shall be shown thereon, including proposed design features.
    i. The plan view English scale shall be 1"=50' horizontal (or different scale as determined by MoDOT Project Manager for clarity) and extend 100 feet beyond project limits.
    ii. The profile view English scale shall be 1"=50' horizontal, and 1"=10' vertical.
c. The CONSULTANT may have to review preliminary cross sections sufficiently to make a cost comparison between using retaining walls versus acquiring additional right of way for all proposed wall locations.
d. The CONSULTANT shall prepare the construction estimate. The COMMISSION shall prepare the right of way estimate based on the right of way requirements furnished by the CONSULTANT.
e. The preliminary plans shall be submitted to the COMMISSION for review and approval. A letter of transmittal shall be provided with the preliminary plan submittal. The COMMISSION shall furnish the template for the letter of transmittal. The construction cost estimate shall also be submitted with the preliminary plans.
f. The preliminary plans shall include the tentative additional easement and right of way limits, property lines and ownerships, section lines, township and ranges, any U.S. Surveys, city limits, and a general outline of the construction staging, critical design items and other items as outlined in the EPG.
g. Traffic assignments shall be shown on the respective roadways or on a line sketch of the roadways.
h. Typical sections shall indicate heavy, medium or light duty pavement for new roadways, along with descriptions of the existing roadway types remaining in place.

1. A Preliminary Field Check will be arranged by the CONSULTANT with the COMMISSION to discuss design features in the project area.

2. The CONSULTANT shall provide the COMMISSION with information for proper environmental and cultural clearance including submittal of the preliminary stage RES, right of way stage RES (if needed) and final stage RES. Items that may need to be addressed include historical buildings, archaeological sites, historic bridges, conversion of farmland, endangered species, wetlands, parklands and historical sites.

3. The CONSULTANT shall set horizontal and vertical control for the project and provide the COMMISSION the combined adjustment factor. All control furnished by the CONSULTANT shall use current datums and adjustments.

4. The CONSULTANT shall provide all land boundary work and legal descriptions to the COMMISSION for review and approval prior to right of way plans submittal.

5. The COMMISSION shall provide the pavement design and general Job Special Provisions related to the project including any special design elements.

6. The COMMISSION may hold a public meeting for this project either in person or virtually and the CONSULTANT will be required to attend and coordinate meeting. The CONSULTANT shall provide exhibits for MoDOT public meeting as requested and will refer to the sections of the EPG concerning public involvement.

VII Right of Way Design

1. The CONSULTANT shall prepare right of way plans, which may be separate drawings from those used for design and construction details. The right of way plans shall show alignment, geometric design, removal of improvements, drainage facilities, property lines and ownership, sub-division lot lines, other land survey information, street lines and existing right of way and easements. The CONSULTANT should also include any plan details, which will require additional right of way or permanent, temporary or utility easements during the construction phase of the project such as bypasses, temporary erosion control, etc. Right of way plans include title sheet, typical sections, profile sheets, and cross sections of the roadway, entrances and side roads. Areas of new right of way, permanent easements and/or temporary easements required from each individual property owner may be shown in tabular form on the respective sheets.

    a. The CONSULTANT shall finalize any previous review of the roadway cross sections sufficiently to determine the feasibility of constructing retaining walls versus obtaining additional right of way. This final review shall consist of construction estimates versus right of way estimates.
    b. Upon completion of the estimates by COMMISSION and CONSULTANT, the CONSULTANT shall recommend to the COMMISSION a choice at the various locations which warrant consideration of the alternate retaining wall versus right of way solutions. The COMMISSION shall make the final determination of purchasing right of way, or constructing retaining walls.

2. Right of way plans shall be submitted to the COMMISSION for review and approval. The right of way plans shall be at the same scale as the construction plans. The right of way plans shall include any design details that will control the width of right of way and necessary easements.

    a. New right of way lines and all easements shall be dimensioned by station and offset distance from the centerline, or crossroad centerlines, if necessary. Bearings and distances on the right of way lines may be required.
    b. The following minimum design features shall be included on the right of way plans:

i. Title sheet with appropriate project limits, access note and traffic data completed.
ii. Typical Sections
iii. Cross sections at 100’ intervals, including additional sections at each entrance with new and existing entrance grades.
iv. Construction limits (slope lines); drainage facilities; entrances and their reference location, width and type along with their existing and future grade percentage; property owners, with areas of new right of way, easements and remaining property; centerline bearing, ties to legal land corners from centerline stations with notation for corner witness by a registered land surveyor; existing utility locations and easements, including replacement utility easements; horizontal curvature information; and proper right of way symbolization for new right of way (access control) and easements, including areas which may be required to accommodate temporary erosion control.
v. Township, Range, Section and/or U.S. Survey information broken down t ¼ ¼ section line level on each plan sheet near the title block or appropriate survey/section line.

3. The CONSULTANT shall provide an updated construction estimate for the Right of Way design stage.

4. The COMMISSION shall review, approve and certify the right of way plans as completed by the CONSULTANT. The CONSULTANT shall provide one (1) electronic set of fully signed and sealed right of way plans, for the COMMISSION’S use.

5. The CONSULTANT shall provide title insurance information for all parcels with new right of way acquisition and the last deed of record for any parcel with easements.

6. The COMMISSION will prepare right of way appraisals and secure the necessary right of way by negotiation or condemnation, if necessary, for construction of this project.

7. The CONSULTANT shall be responsible for staking and re-staking tentative right of way on individual properties, as required by MoDOT staff, during right of way negotiation and acquisition phase of the project. The CONSULTANT shall also set permanent monuments as shown on the recordable land survey.

8. The CONSULTANT shall be responsible for making all revisions to the right of way and construction plans due to negotiations with the property owners in an effort to acquire right of way.

9. The CONSULTANT shall write, sign and seal deed descriptions for all right of way acquisitions on MoDOT’s approved Exhibit A form and submit to COMMISSION.

10. The CONSULTANT will provide the COMMISSION with information for proper environmental and cultural clearance including submittal of the Right of Way stage RES. Items that may need to be addressed include historical buildings, archaeological sites, historic bridges, conversion of farmland, endangered species, wetlands, parklands and historical sites.

VIII Final Roadway Design

1. The COMMISSION will secure execution of municipal agreements with the cities and/or county agreements. A copy of the executed agreements will be furnished to the CONSULTANT for his information. The CONSULTANT shall conform to all design provisions of these agreements.

2. A final design field check shall be held with CONSULTANT and COMMISSION representatives prior to completing final design plan quantities. The CONSULTANT shall make any necessary revisions to the final plans as determined by this design field check.

3. The CONSULTANT shall prepare detailed temporary erosion control plans for review and approval before inclusion in the final design plans. The CONSULTANT will submit a Final Plans stage RES and help ensure previous RES items have been addressed.

4. The CONSULTANT shall prepare computations for all design plan quantities. All plan quantities shall be shown on the Quantity Sheets, by construction stage, if applicable. The format for these sheets shall be furnished by the COMMISSION. Specialty items may have separate sheets for quantity tabulations.

5. The CONSULTANT shall prepare for review and approval by the COMMISSION all General Job Special Provisions, which are to supersede the Missouri Standard Specification for Highway Construction. A brief reason for the deviation from the standard plans and specifications should also be provided. The CONSULTANT shall prepare only Job Special Provisions related to design elements shown in the plans.

6. The following list shall be considered the minimum requirements for a complete set of Final Design Plans.

    a. Title Sheet
    b. Typical Sections
    c. Quantity Sheets
    d. Plan Sheets at 1”=50’ horizontal (or different scale as determined by MoDOT Project Manager for clarity). Plan sheets shall include all necessary adjustments to signing and proposed pavement marking.
    e. Profile Sheets at 1”=50’ horizontal and 1”=10’ vertical
    f. Culvert Sections at 1”=10’, if needed

g. Special Sheets for geometrics, referenced points, grading plan, traffic control plan, temporary erosion control plan and any other sheets for special design features.
h. Earthwork Quantities, Cross Sections at 25' intervals, 1"=10' (1:100), horizontal and vertical, including entrance sections with existing and proposed grades
i. Tabulation of Quantity Sheets
j. Job Special Provisions in electronic format readable in COMMISSION'S current word processor
k. File with the bid items and quantities as generated by COMMISSION'S Estimate Program
l. Construction Workday Study
m. Transportation Management Plan
n. Final Plans Checklist Form D-12

7. Additional plans and information may be required to complete the Final Design Plans. With the submittal of the Final Design the CONSULTANT shall also provide the COMMISSION a statement that an internal quality control check has been conducted and to the best of the CONSULTANT'S knowledge the final design plans are free of gross errors, misleading or confusing typos, and includes adequate information to construct the project.

8. The CONSULTANT shall prepare all plans through the use of a Computer Aided Drafting (CAD) program. The CONSULTANT shall conform to MoDOT's Specifications for Computer Deliverable Contract Plans as referenced in the MoDOT EPG.

9. The CONSULTANT shall furnish the COMMISSION the following completed sheets and documents, as applicable, for each separate construction project included in this contract, as follows:

    a. Final Design Plans showing profile grades, geometric data, alignment data, etc.
    b. One (1) electronic copy of the location sketch for Commission Approval submitted in electronic format.
    c. Draft copy of the job special provisions related to design elements for review. After corrections, the job special provisions shall be furnished in electronic format utilizing the COMMISSION'S latest word processing program.
    d. One (1) legible electronic copy of engineering calculations and analysis.
    e. One (1) electronic copy of a complete summary of quantities and estimate of construction costs. The estimate shall be prepared using the latest version of MoDOT's ESTIMATE program.
    f. One (1) electronic copy of Electronic Design Data.
    g. One (1) electronic copy of a workday study showing the estimated number of workdays required to construct each project.
    h. The CONSULTANT shall provide a 3D model of the project exported from Geopak Open Roads Designer software for the COMMISSION'S use.

IX Construction Support

1. The CONSULTANT shall be available to the COMMISSION to discuss and interpret plans and specifications during the bidding and construction phase of the project as determined necessary by the Engineer.

2. The CONSULTANT shall be available to provide Shop Drawing review of CONTRACTOR submittals pertaining to essential structural components and review any contractor's Value Engineering Proposals.

3. The CONSULTANT may be required to attend a pre-construction meeting, and a post construction meeting via TEAMS.

4. If issues arise during construction, there will be a direct line of communication established between the MoDOT Construction Office and the CONSULTANT. The CONSULTANT will immediately inform the MoDOT Design Division or MoDOT Bridge Division of any recommendations or clarifications made to the Construction Office.

EXHIBIT II

SERVICES PROVIDED BY THE COMMISSION

The Commission will furnish to the Consultant without charge the following information:

A. General design criteria.
B. Available standard detail sheets in Microstation format.
C. Traffic and accident data.
D. Pavement Design Selection
E. All necessary environment services identified through the Request for Environmental Services
F. Right of way and easement acquisition.

The Consultant shall proceed with the final design and detail plans in accordance with the data approved or furnished by the Commission which will meet with the general standards adopted by AASHTO and approved by the Department of Transportation as provided by Title 23, United States Code, Section 109(b).

EXHIBIT IV

PERIOD OF SERVICE

The Consultant shall make submittals in accordance with the schedule described below:

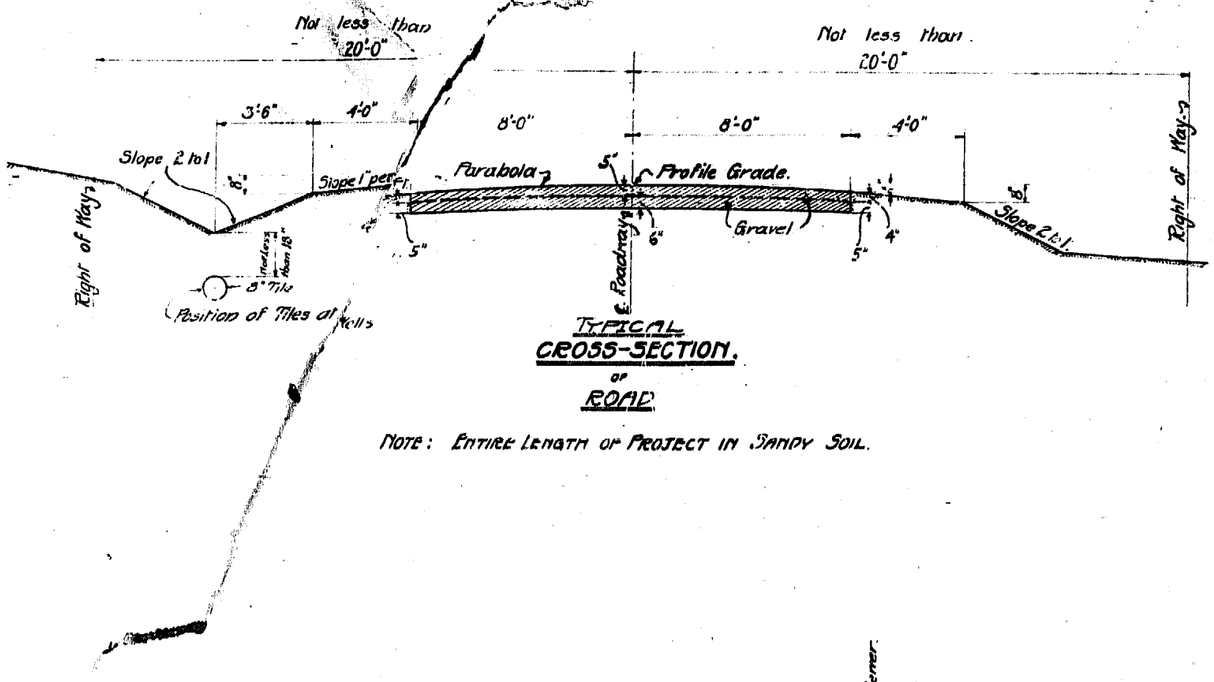
Period of Service	
Letting	March 2027
PSE	12/1/2026
100% Review Plans	10/2/2026
Final RES	10/2/2026
ROW Plans/ROW RES	2/20/2026
Public Meeting Exhibits	1/9/2026
Preliminary Roadway Plans	12/5/2025
Preliminary RES	12/5/2025
Conceptual Report	10/17/2025

Construction support as needed post award – Anticipated for 24 months

PERIOD OF SERVICE – The total period of service including construction services is expected to be completed by April 1, 2029.

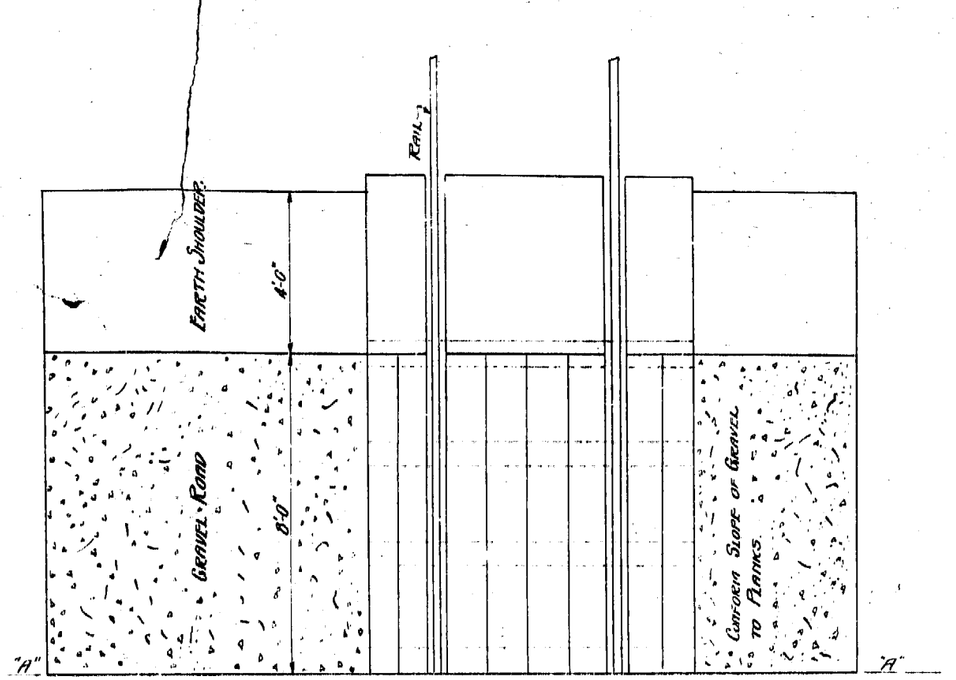
FED. ROAD DIV. No.	STATE	FEDERAL PROJECT No. & SEC.	SHEET No.
5	MO.	F-26	
DIST. No.		COUNTY	ROUTE	SEC.
10	DUNKLIN	25	

TITLE SHEET

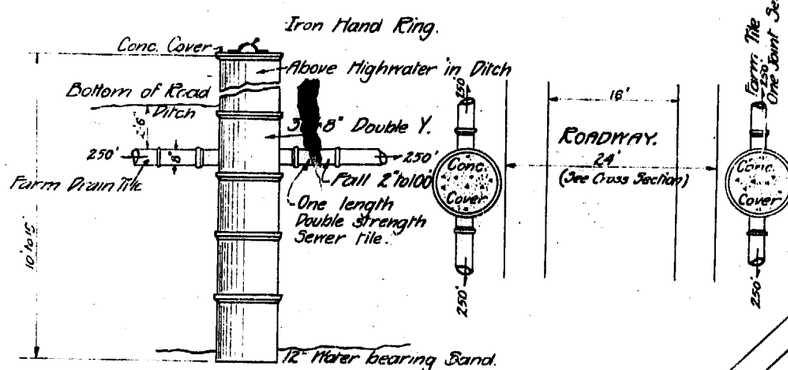


TYPICAL CROSS-SECTION. OF ROAD

NOTE: ENTIRE LENGTH OF PROJECT IN SANDY SOIL.



ONE HALF PLAN OF RAILROAD CROSSING.



ELEVATION

PLAN.

TYPICAL DRAINAGE WELL.

$W = 4'0"$

$R_1 = R - 8$

$E = R_1 \text{EXSEC} \frac{I}{2}$

$R_2 = R_1 + \frac{W}{\text{EXSEC} \frac{I}{2}}$

$T_1 = R_1 \text{TAN} \frac{I}{2}$

CROSS-SECTION ON LINE "A-A"

PLAN AND SECTION TYPICAL RAILROAD CROSSING

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	Mo.	26	1926	3	24

L.B. & R.W. STOKES — SEC. 22 — TWP. 23 N. - R. 10E.

County Line

Rang 10

COUNTY

COUNTY

STODDARD

DUNKLIN

Beginning of Layout

B.M. 16 - El. 297.96 - Nail in Tel. Pole at Sta. 0+64

℄ of Road

Iron Pin

Sta. 0+00

Well

250' Farm Tile underdrain.

West ¼ Sec. Line ~ Sec 22

South.

110.

250' Farm Tile Underdrain

Well.

E ¼ Sec. Line ~ Sec. 22

Ho.

Barn

179° 58'

Sta. 26+41.9

Fence Post

110°

52.8

10.55

Δ = 0° 02' Tot.

Fence Post

110°

L.B. & R.W. STOKES

Fence Post

South.

124° 43'

300

290

280

Finished Grade

Bottom of Ditch

0.104%

-0.011 %

+0.50%

+0.2375 %

+0.075%

0.00%

-.11%

-0.3145 %

+0.33 %

+0.10 %

+0.23 %

250 Farm Tile

250' Farm Tile

Well.

El. 296.80

El. 295.20

El. 297.60

El. 293.90

297.5 298.10 297.3 297.2 297.1 297.3 296.2 297.0 296.8 297.3 96.3 298.00 297.2 298.1 298.5 298.6 298.6 298.7 299.80 298.7 298.7 298.7 299.90 298.2 298.1 297.5 297.3 296.5 296.6 296.5 297.60 296.5 298.2 297.8 299.60 297.8

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	Mo.	[illegible]	19[illegible]	4	24

N. Var. 5°E.

L.B. & R.W. STOKES — EMMA PORCH — EMMA PORCH — MRS. P.A. PAXTON

SEC 22 — Road — SEC. 27.

B.M. 15 - El. 296.82 — Nail in Tel Pole at Sta 39+20

West ¼ Line Sec. 22

S.0°-02'W.

250' Farm Tile Underdrain

Tenn Fence

Well.

Ho.

West ¼ Line Sec. 27

S. 0° 11' W.

Δ - 0° 09' Rt.

178°-51'

Sta. 53+08.3

L.B. & R.W. STOKES — EMMA PORCH. — EMMA PORCH — MRS. P.A. PAXTON.

S ¼ Line Sec. 22

S.0°-11'W.

Δ 0°-09" Rt.

Finished Grade

Bottom of Ditch

250' Farm Tile

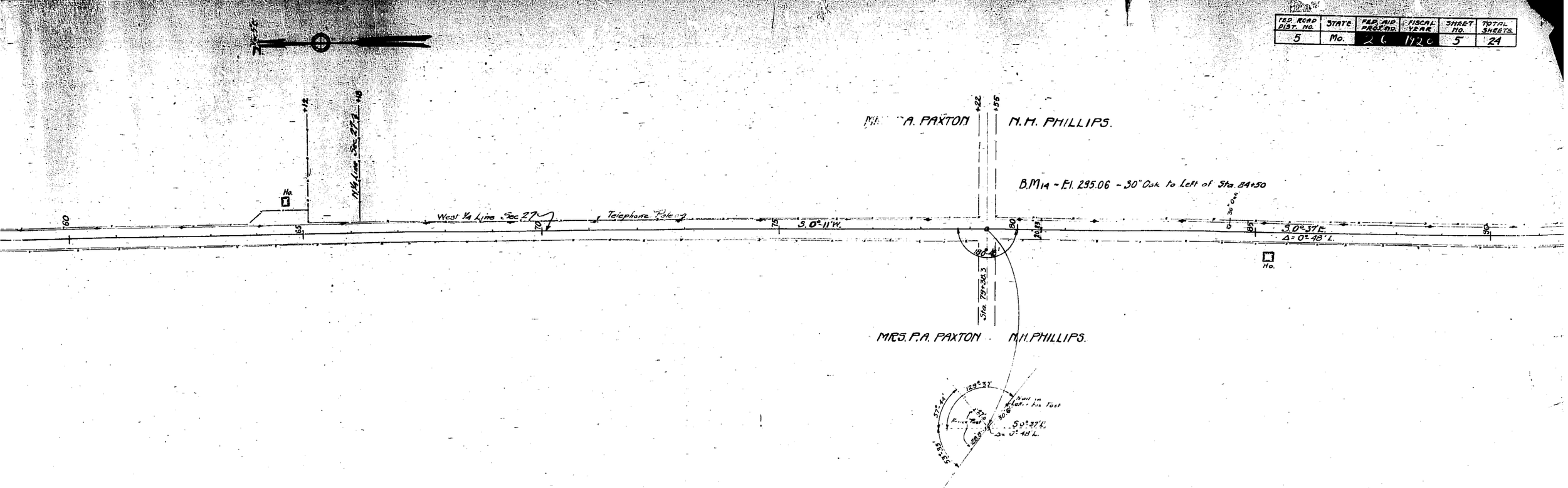
Well

+0.01% +0.23% −0.20% −0.70% +0.05% −0.20% −0.23% −0.71% +0.16% +0.10% 0.00%

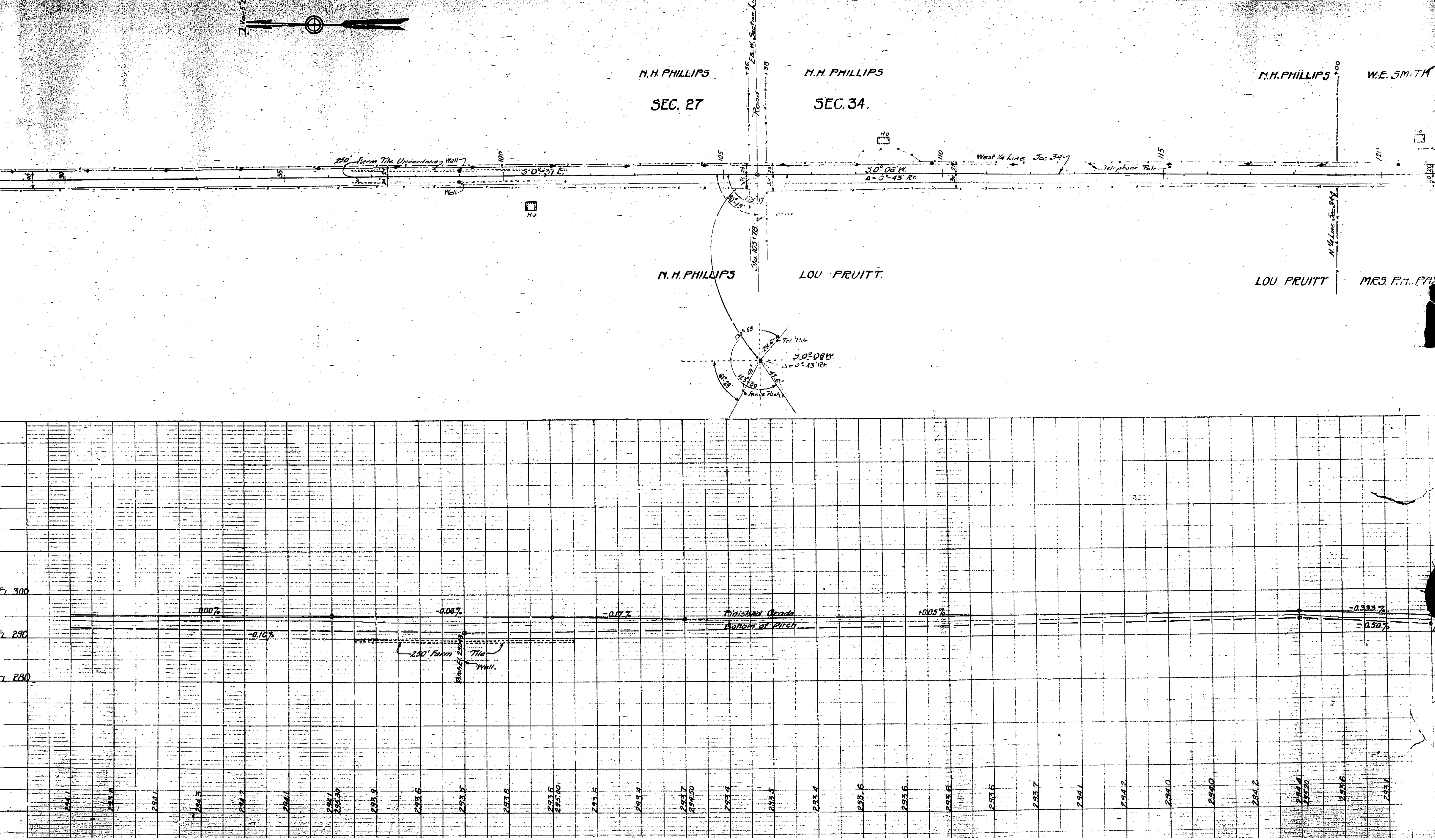
Fl. 296.

296.0 296.99 297.9 298.90 297.1 298.00 297.1 296.5 296.7 296.9 297.0 296.5 296.99 296.7 296.1 296.1 296.4 297.30 296.2 295.7 295.6 295.4 295.3 295.2 296.30 295.3 295.4 295.3 295.3 296.0 297.00 294.3

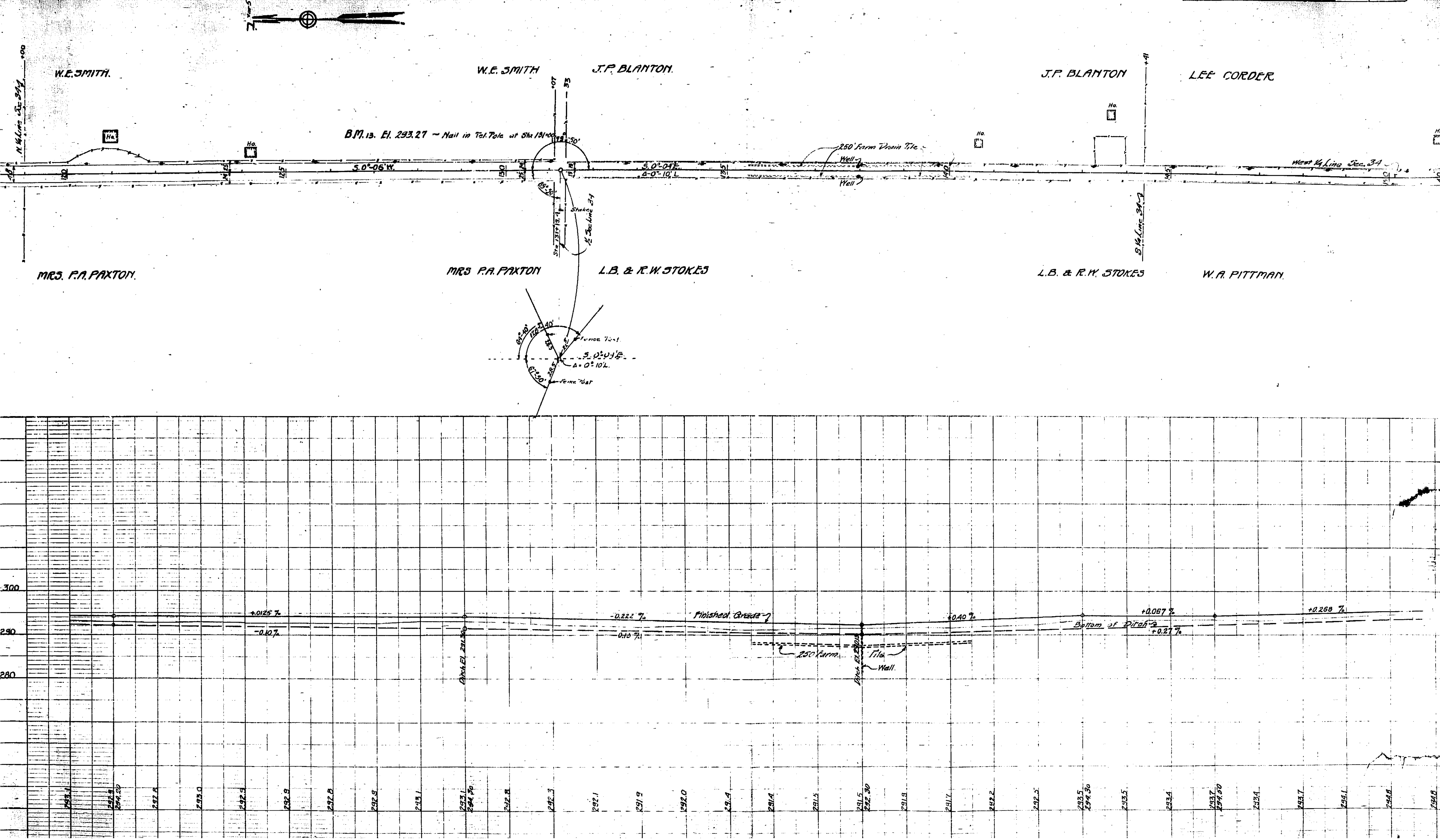
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	Mo.	26	1920	5	24



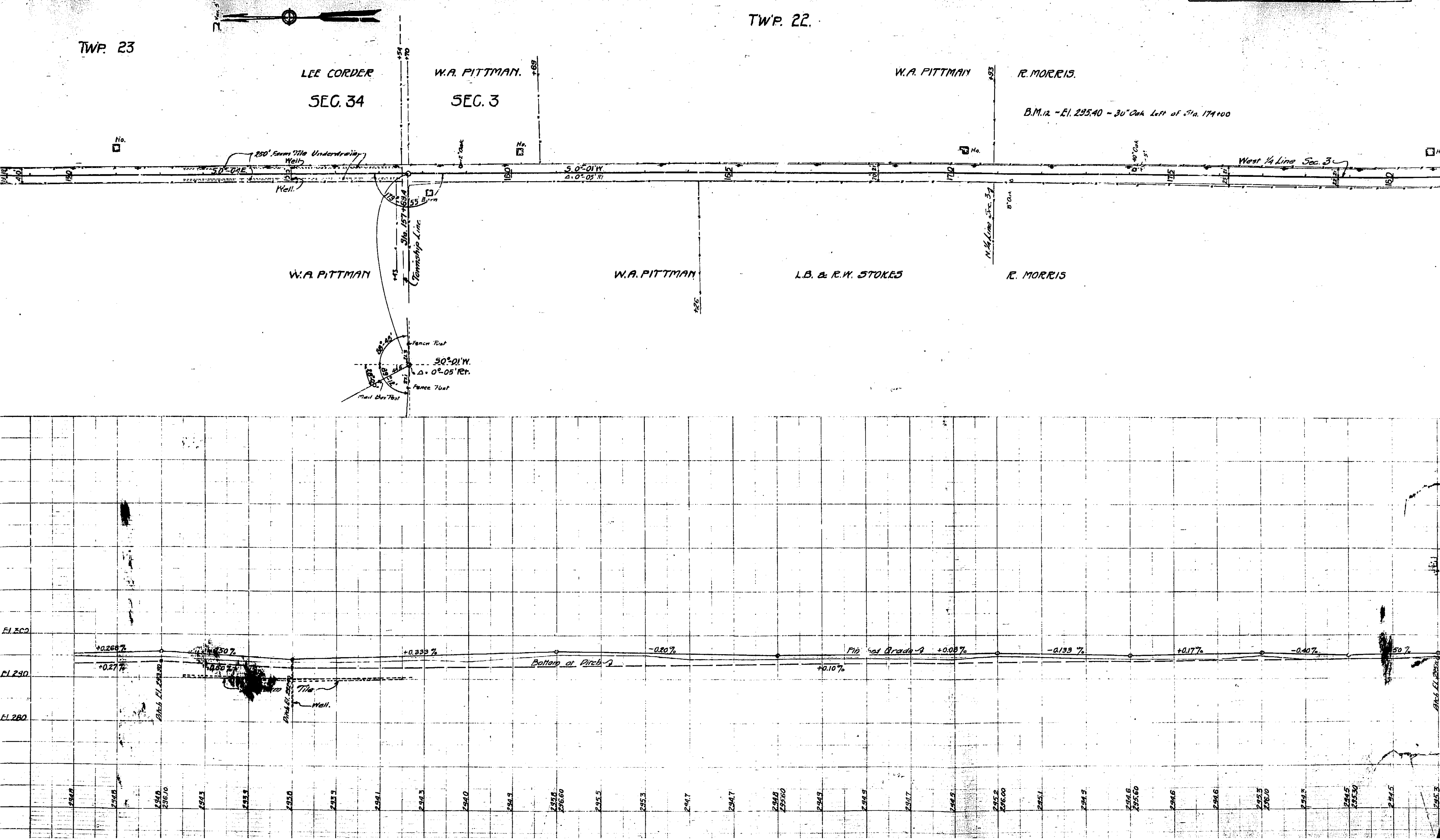
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	Mo.	[illegible]6	192[illegible]	6	24



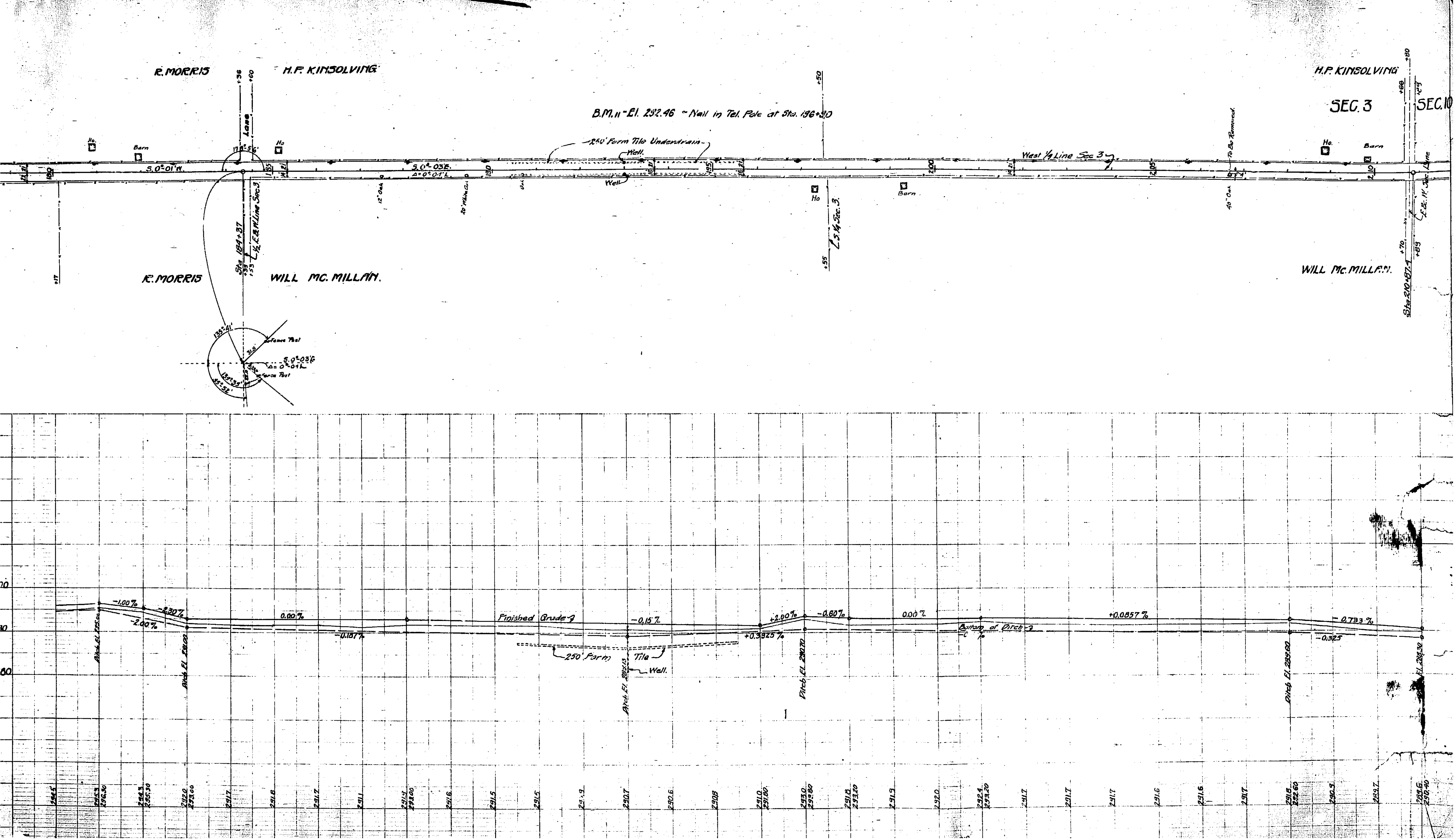
FED. ROAD DIST. NO.	STATE.	FED. AID PROJ. NO.	FISCAL YEAR.	SHEET NO.	TOTAL SHEETS
5	Mo.	26	1920	7	24



FED. ROAD DIST. NO.	STATE.	FED. AID PROJ. NO.	FISCAL YEAR.	SHEET NO.	TOTAL SHEETS.
5	Mo.	[illegible]	[illegible]	8	24



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	Mo.	[redacted]	[redacted]	9	24



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	Mo.	26	1920	10	24

H.P. KINSOLVING — LEVI MERC. CO. — LEVI MERC. CO. — INEZ COX. — INEZ COX

SEC. 3. — SEC. 10.

E. & W. Sec. Line — N. & S. Sec. Line (continued)

B.M. 10 - El. 290.02 ~ Nail in N.W. root of 10" Oak at Sta. 222+00

Barn — Barn — Ho. — 250' Farm Tile Drain — Well — Wood Fence — No Fence — Telephone Pole — Telegraph Pole — Stone — Crushed Tel. Wire Crossing — N. 58½ W. 4 Line Wire — North City Limits Malden — Ellie Nixon — Rebecca Liebermuth — Mc. Millan — Ho. — Ho. — Telephone Pole — Telegraph Pole — Sta. 237+68 Reedle Hill Road — C.M. Jones — Francis Street

S. 0°-08' E. — 210' — 3.0° 28' E. — 4.0° 25' L. — 220' — 125' — 225' — 130' — 125' — 3.0° 28' E. — 4.0° 00' — 240'

16" Oak — 10" Oak — 6" Oak — 6" Oak

WILL Mc. MILLAN — LEVI MERC. CO. — LEVI MERC. CO. — PRUITT BROS. — PRUITT BROS.

Sta. 210+37.4 — 153' — 27.7' — 45.3' — 45.4' — 60° 38' — Fence Post — Fence Post — Fence Post

135° 24' — Tel. Pole — 4.0° — 3.0° 00' — 30.5' — 30.5' — Tel. Pole

N. 14° 03' From — Ditch El. 291.20

Ditch El. 292.30 — Ditch El. 292.20 — Ditch El. 286.80 — Ditch El. 288.00

Finished Grade 0.075% — 250' Farm Tile — Well — Bottom of Ditch A

-0.20% — -0.10% — +0.225% — -0.20% — -0.10% — -0.30% — +0.125% — +0.15% — +0.28% — -0.45% — 0.00% — +0.10% — +0.13%

300 — 290 — 280

Sta. 210 — Sta. 220 — Sta. 225 — Sta. 230 — Sta. 235 — Sta. 240

F.A.D. Road Dist. No.	State	Fed. Aid Proj. No.	Fiscal Year	Sheet No.	Total Sheets
5	Mo.	26	1920	11	24

Var 5° E

SEC. 10 SEC. 15.

B.M.9 - U.S.G.S.B.M. - El. 239.00 ~ On Main Street between Dean and Madison Streets in Malden.

M.J. McMILLAN — A.S. DAVIS — DR. H.E. BEALL — CATHOLIC CHURCH — H.H. PHILLIPS — L.F. MILLER — SPILLER HEIRS

STREET — STREET — STREET — STREET

S.8°20'E — West ¼ Line Sec. 10

C.W. JONES — FRANCIS — SAM DAVIS — SID DAVIS — J.D. STUBBLEFIELD — CLEVELAND — A. LEIBENMUTH — H.E. TOMLINSON — J.D. VAN CLEVE — A.L. STOKES — PARK — PRESBYTERIAN CHURCH — A.L. STOKES — SYL. MACHEN — HOWARD — J.A. MARSHAL — HILDA Mc DANIEL — HILDA Mc DANIEL — SPILLER HEIRS — MAIN

MALDEN.

LACLEDE — CYPRESS — OZARK

MADISON STREET — ½ Line Sec. 10-9

E. & M. Railroad

B.M.8. ~ El. 293.38 ~ Nail in S.E. Corner Semaphore Base, Cottonball Station

Cannon Ball 153' To Sum City Limits St. Louis

ST. L. & S.W. R.R.

BECKWITH STREET

MARION STREET

MAIN STREET

N. ¼ Line Sec. 15-9

PLAN SHOWING EXCEPTION FROM STA. 257+66 TO STA. 294+40.

Scale 1"=200'

300

290

280

+0.13 %

Finished Grade

0.00 %

+0.66 %

0.00 %

El.

El.

El.

Fed. Road Dist. No.	State	Fed. Aid Proj. No.			
5	Mo.	26	620	12	24

B.F. MARKLE

Mud Fence

Common Ex. 11.

Var. 6° E.

Sta. 290+01 Spiking Sec. 15

Beginning of South End of Layout at South City Limits Station 294+40

Not included in Project

SOUTH CITY LIMITS MALDEN.

MRS. F.L. COX.

½ Line Sec. 15

Telephone Poles

Wells

250' Farm Tile Underdrain.

14" Oak to be removed

Frisco Spur

Cattle Guard

B.M. 7 El. 288.28 ~ Nail in Tel. Pole at Sta. 311+15.

B.F. MARKLE

R.W. STOKES, JR.

¼ Line Sec. 10

250' Farm Drain Tile

Well

No.

Tel. Pole

Fence Post

Finished Grade

Bottom of Pitch

Ditch El. 288.30

Ditch El. 288.24

Ditch El. 288.20

Ditch El. 288.10

Ditch El. 288.00

A.T.&S.F. Crossing

-0.99 %

-0.45 %

0.00 %

+0.90 %

+0.21 %

-0.34 %

0.00 %

-0.94 %

-0.37

1.00 %

-0.87 %

+0.625 %

+0.15 %

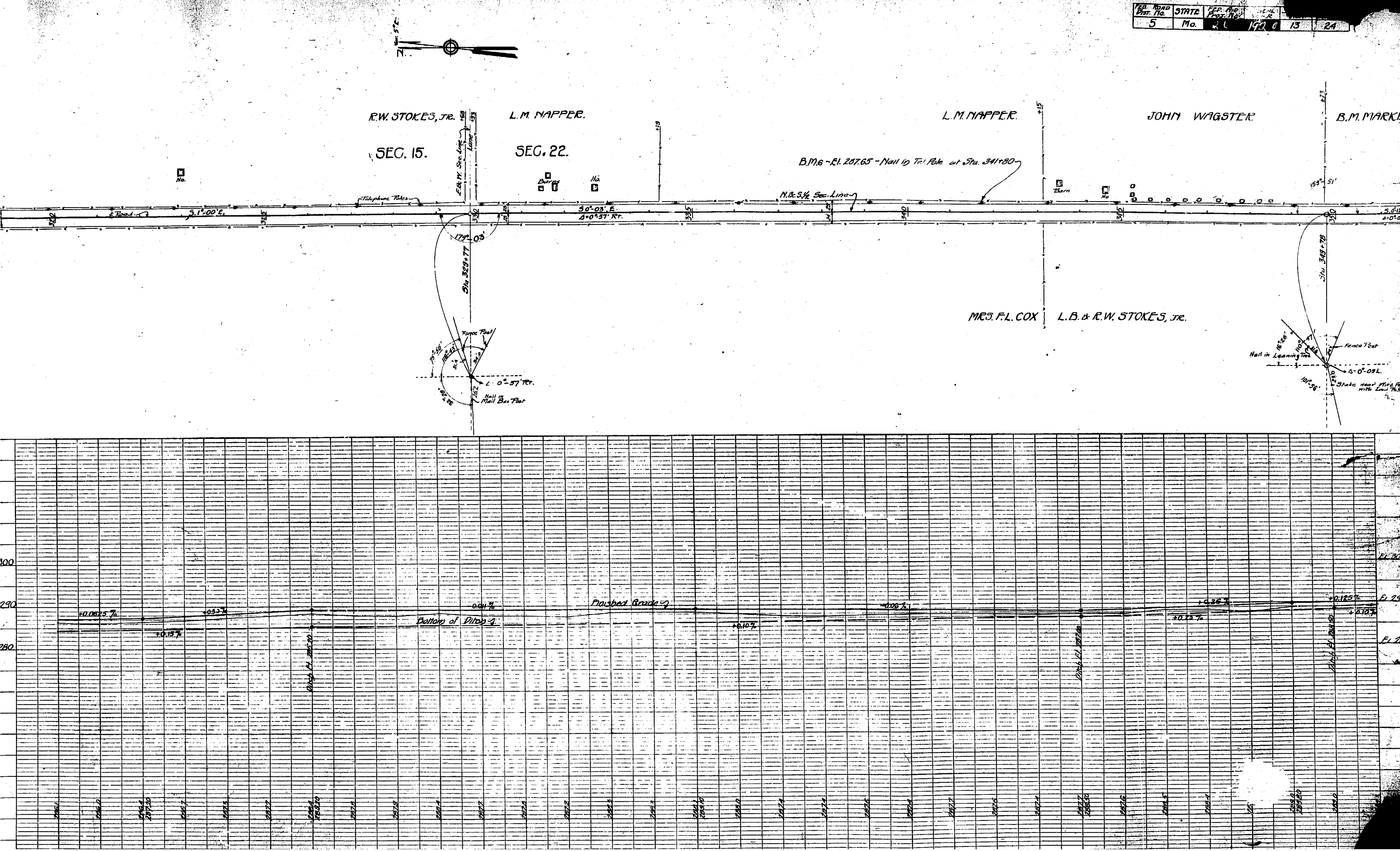
250' Farm Tile

112.15

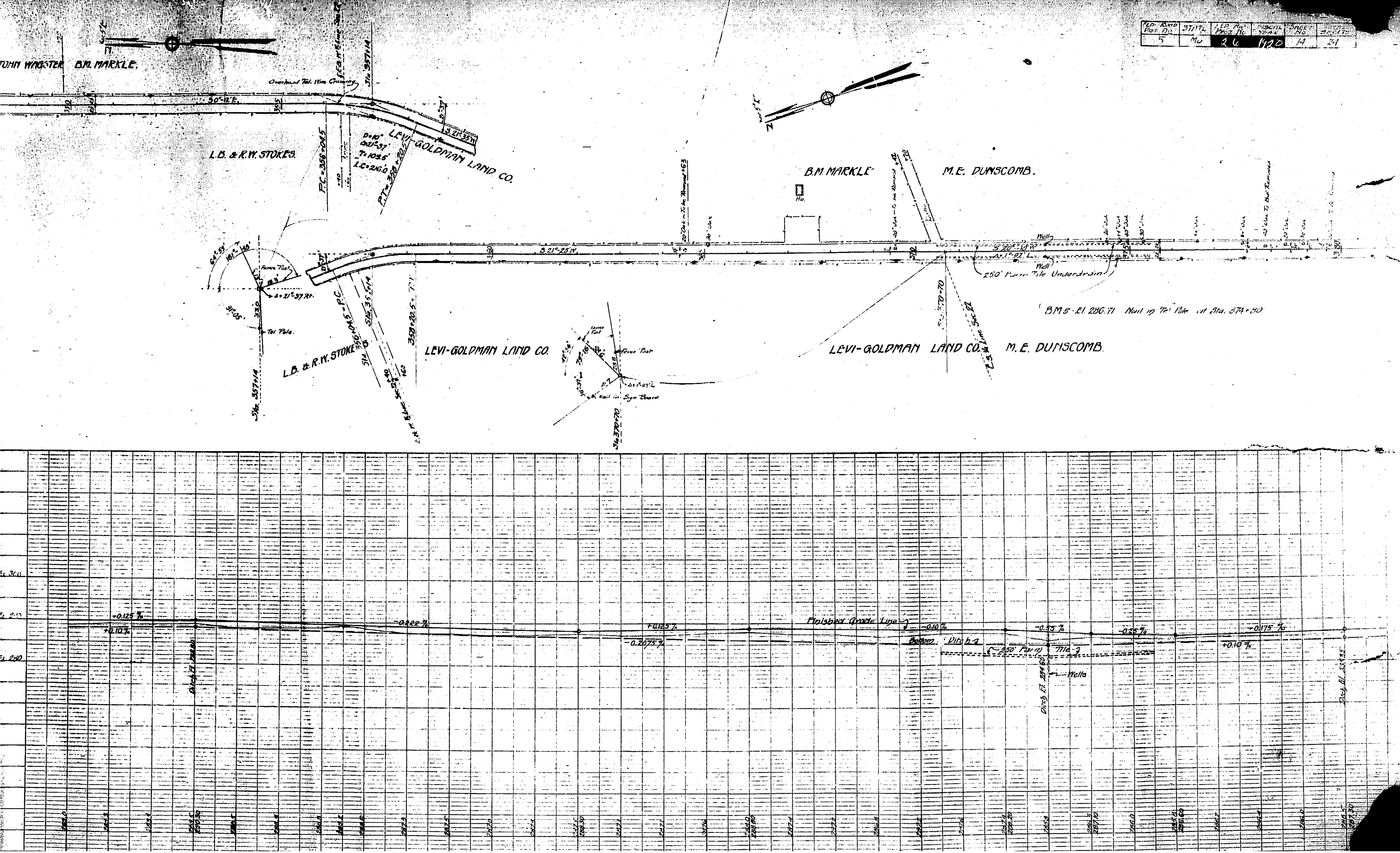
300

240

280



Fed. Road Dist. No. 5
State Mo.
13
24
R.W. STOKES, JR.
L.M. NAPPER.
SEC. 15.
SEC. 22.
L.M. NAPPER.
JOHN WAGSTER
B.M. MARKLE
B.M.6 ~ El. 287.65 ~ Nail in Tel. Pole at Sta. 341+80
E&W. Sec. Line
Lane
Telephone Poles
N. & S. 1/2 Sec. Line
Ho.
Barn
S.1°-00'E.
S0°-03'E.
Δ=0°-57' Rt.
179°-03'
Sta. 329+77
Sta. 349+78
Fence Post
Nail in Mail Box Post
Nail in Leaning Tree
Stake near Wire Fence with Teel. Poles
Δ=0°-05'L.
MRS. F.L. COX
L.B. & R.W. STOKES, JR.
Finished Grade
Bottom of Ditch
+0.0625 %
+0.15 %
+0.53 %
0.01 %
+0.10 %
-0.06 %
+0.25 %
+0.26 %
+0.125 %
+0.10 %
El. 300
El. 290
El. 280



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	Mo	26	1920	14	24

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	Mo.	26	1920	16	24

SEC. 27 SEC. 34.

A.L. STOKES

A.L. STOKES

R.E. DUNSCOMB

E. & W. Line Sec. 27

S.1°-11' W. Δ=1°-49' L.

250' Farm Tile Underdrain

Wells

Sta 420+33.4

P.C.C. 420+92.9

Δ = 31°-28'
D = 20°
T = 80.7'
L.C. 137.3'

P.T.C. 414+38.2

Millers To Be Removed by Township.

P.C.C. 419+83.4

Δ = 29°-30'
D = 30°-00'
T = 50'
L.C. 97.5'

Sta 421+61

(Concrete Culvert 4'0"-2'0"-24' Long State Std. R.M. 222 Equalizing Culvert (No Flow)

R.R. Borrow Pit

S.0°-57' E.

Sta 424+76

S.0°-59' E. Δ=0°-02' L.

S.T.L. & S.F. R.R. — Main Track

Industry Track

Telegraph Poles

Telephone Poles

Disconnected Telegraph Wire Crossing

W. ¼ Sec. Line

E. & W. Sec. Line

PROVIDENCE.

School.

MRS. T.P. BALDWIN

GEORGE SMITH

MRS. MINNIE MILLS.

154°-55'

Tel. Poles

Tel. Pole

Nail in S.E. Cor. of Cattle Guard.

Sta 420+33.4

Nail in 10th Tie So. of So. End of Xing.

Nail in 10th Tie So. at So. End of Crossing

Δ=31°-28' L.

Stake in Field

Fence Post

Stake in Field

Ditch El. 220.90

Floated Grade 0.00%

200' Farm Tile

Ditch El. 224.70

Well

Ditch El. 228.50

Ditch El. 232.30

Ditch El. 236.10

Ditch El. 239.90

Ditch El. 243.70

Ditch El. 247.50

Ditch El. 251.30

Ditch El. 255.10

Ditch El. 258.90

Ditch El. 262.70

Ditch El. 266.50

Ditch El. 270.30

Ditch El. 274.10

Ditch El. 277.90

Ditch El. 281.70

Ditch El. 285.50

Ditch El. 289.30

Ditch El. 293.10

Ditch El. 296.90

Ditch El. 300.70

+0.45%

-0.093%

Railway of Ditch

+1.20%

+1.00%

0.00%

-0.78%

+0.125%

+0.575%

+0.25%

+0.10%

-0.20%

-1.0%

-0.20%

-0.4375%

+0.16%

-0.10%

Fl. of Floor of Culvert = 220.80 (Grade of Ditch)

Culvert Outlet to the right.

1910 Cu. Yd. Borrow between Sts. 415+00 and 424+00

R.R. Crossing — Top of Rail

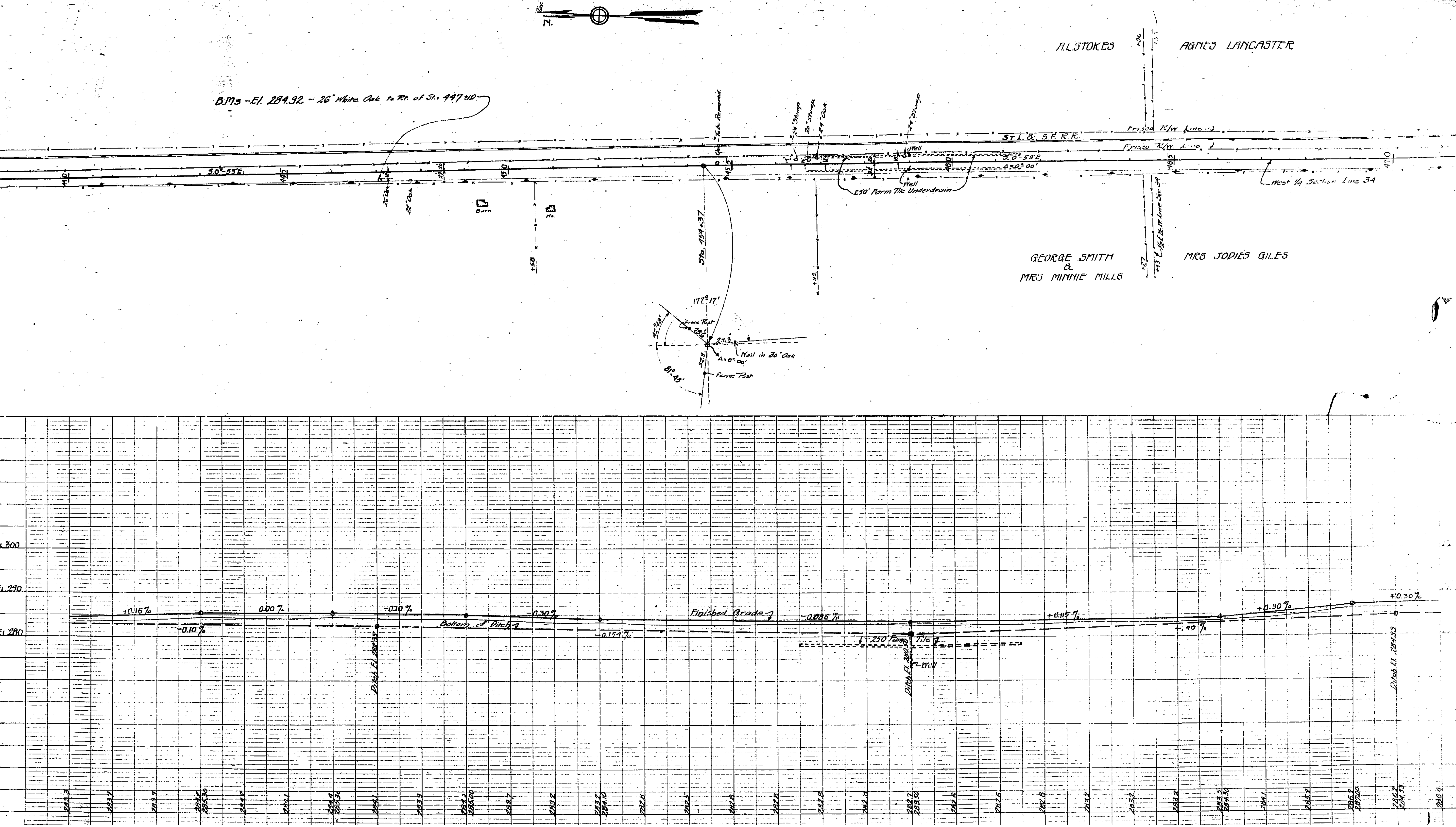
Fl. 300

Fl. 290

Fl. 280

NOTE:- Sand-blows on right from Sta. 426+00 to 438+00 (See Sheet No. 23)

FED. ROAD DIST. No	STATE	FED. AID PROJ. No	FISCAL YEAR	SHEET No.	SHEETS
5	Mo.	26	1920	17	24



T'W'P. 22. N.~R. 10E. SEC. 34. W'P. 21

FED. DIST. NO.	STATE	FED. AID PROJ. NO.	MISC. YEAR	
5	Mo.	26	1926	18

18

COTTON-HILL TOWNSHIP. FREEBORN TOWNSHIP.

AGNES LANCASTER G.

G.F. BROWN.

D = 38°
Δ = 40°-41'
R = 150.81
T = 155.39
L.C. = 234.70

PT-491+70.3

Sta 491+90.3 End of Layout.

PC 489+31.6

Flat Curve

Sta 490+87

20 Oak

40 Oak - To Be Removed

St. L. & S. F. R. R.

Frisco R/W Line

Frisco R/W Line

S 0°-59' E

410 24 110 415 180 145

West 1/4 Sec. Line

Overhead Wire Crossing

E.E. X-ing - Sta 490+50

B.M.1 - El. 290.00 - U.S.G.S. B.M.

J.T. TEMPLETON.

B.M.2 - El. 287.22 - 26" Oak to Rt. at Sta 478+20

MRS JODIES GILES J.T. TEMPLETON

S 1/4 Line Sec. 34

+73

Fence Post

Fence Post

Fence Post

Fence Post

Sta 490+87

West 1/4 Sec. Line

J.T. TEMPLETON

Sta 490+87

End of Layout Sta 491+90

N 1/4 Sec. Line

SEC. 34.
COTTON HILL TOWNSHIP.

G.P. BROWN.

Township Line

FREEBORN TOWNSHIP.

SEC. 3

300

290

280

+0.30%

-0.225%

+0.10%

Bottom of Ditch

+0.286%

+0.284%

Finished Grade

+0.13%

+0.10%

+0.70%

0.00%

Ditch El. 285.73

Ditch El. 287.22

Ditch El. 287.75

470 cu. yd. to be used as fill between Sta. 83 and 87

Culvert 288.00 Natural Fall

End of Layout

FED. ROAD DIST. No.	STA…
5	MO…
DIV. No.	COU…
10	DUNK…

13

MISSOURI
STATE HIGHWAY COMMISSION
PLAN AND PROFILE OF PROPOSED
STATE ROAD
FEDERAL AID PROJECT
DUNKLIN COUNTY

SCALES: PLAN 1 IN = 100 FT; PROFILE HOR 1 IN = 100 FT VERT 1 IN = 10 FT; CROSS SECTIONS 1 IN = 5 FT

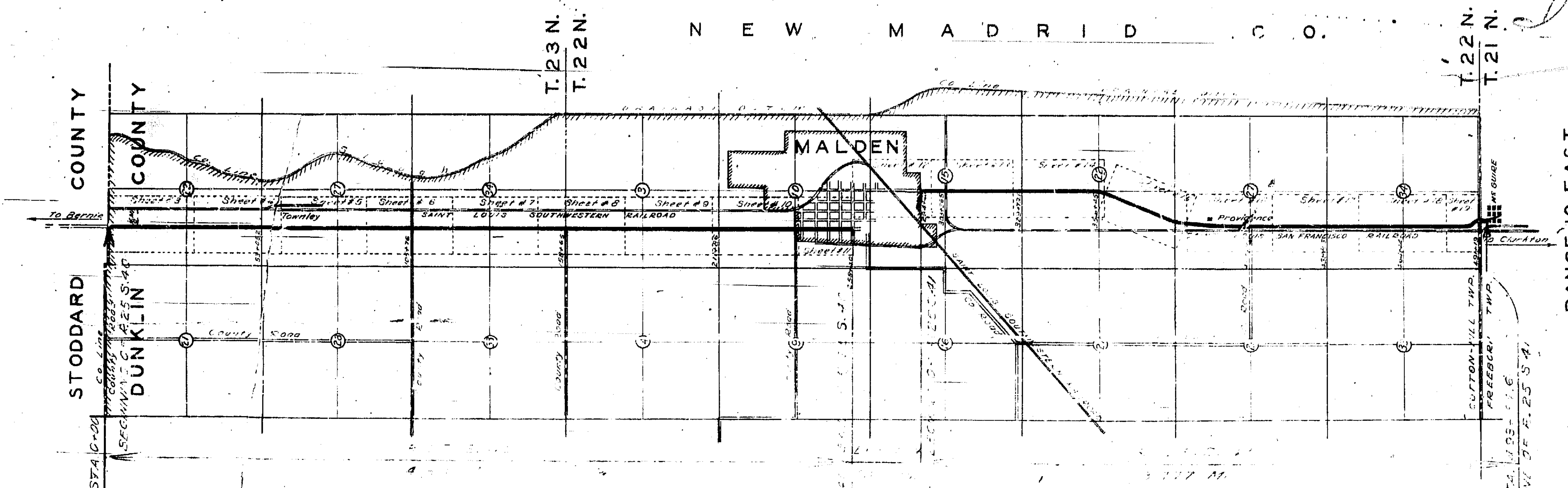
INDEX OF SHEETS

SHEET NO 1	TITLE PAGE			
" " 2	TYPICAL CROSS-SECTION OF IMPROVEMENT			
" " 3	PLAN AND PROFILE	STA. 0+00	TO STA.	30+00
" " 4	" " "	" 30+00	" "	60+00
" " 5	" " "	" 60+00	" "	90+00
" " 6	" " "	" 90+00	" "	120+00
" " 7	" " "	" 120+00	" "	150+00
" " 8	" " "	" 150+00	" "	180+00
" " 9	" " "	" 180+00	" "	210+00
" " 10	" " "	" 210+00	" "	240+00
" " 11	" " "	" 240+00	" "	294+40
" " 12	" " "	" 294+40	" "	300+00
" " 13	" " "	" 300+00	" "	330+00
" " 14	" " "	" 330+00	" "	360+00
" " 15	" " "	" 360+00	" "	390+00
" " 16	" " "	" 390+00	" "	420+00
" " 17	" " "	" 420+00	" "	450+00
" " 18	" " "	" 450+00	" "	480+00
" " 19	" " "	" 480+00	" "	493+64.6
" " 20 TO 62	CROSS SECTIONS			
" " 63	MASS DIAGRAM			

LIST OF CULVERTS USED

F. E. M-11

Final Plans R25S40 Dunklin Co.



CONVENTIONAL SIGNS

STATE AND NATIONAL LINE
COUNTY LINE
CITY, VILLAGE OR BOROUGH
TOWNSHIP LINE
SECTION LINE
GRANT LINE
FENCE LINE
GUARD RAIL
UNFENCED PROPERTY
RIGHT OF WAY LINE
TRAVELED WAY
RAILROADS
RETAINING WALL
BASE OR SURVEY LINE
LEVEE
CULVERTS
DROP INLET
TROLLEY POLE
POWER POLE
TELEPHONE OR TELEGRAPH POLE
MARSH
HEDGE
GROUND ELEVATION
GRADE ELEVATION
SURFACE LINE
GRADE LINE

EXCEPTIONS

258+40 TO 294+40
3600 FT.

SCALE OF LAYOUT
1 IN = 2000 FT.

EQUATIONS
NONE

LENGTH OF PROJECT

APPARENT LENGTH	49384.6 FT.	9.353 MILES
GROSS LENGTH	45784.6 "	8.671 "
NET LENGTH	45784.6 "	8.671 "

SUBMITTED

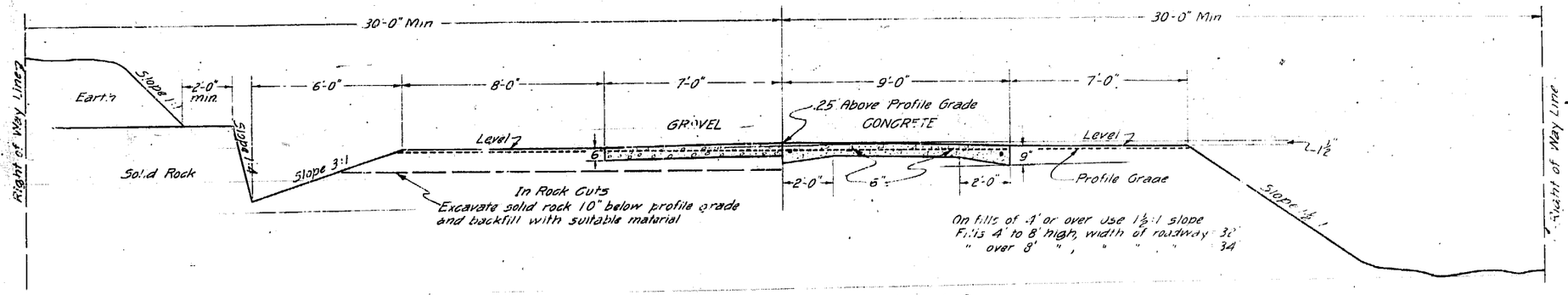
CHIEF ENGINEER MO. S…
RECOMMENDE…

DISTR…
RECOMMEN…

APPROV…

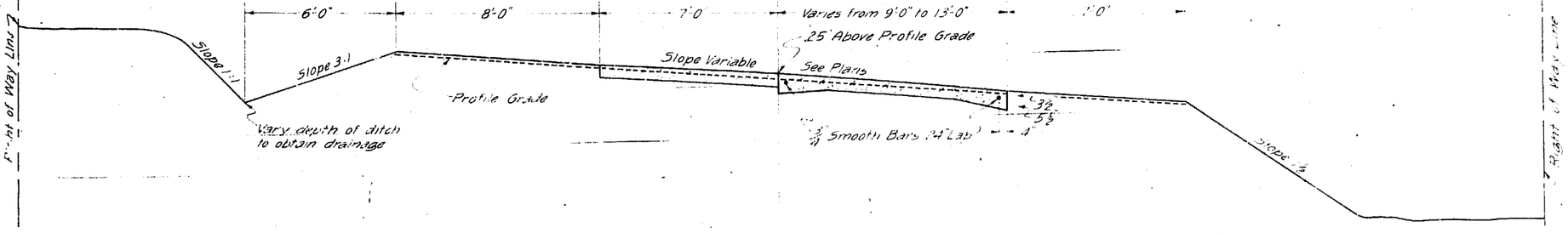
DIST NO. 5 | DIV NO.

TYPICAL CROSS-SECTION ON TANGENTS

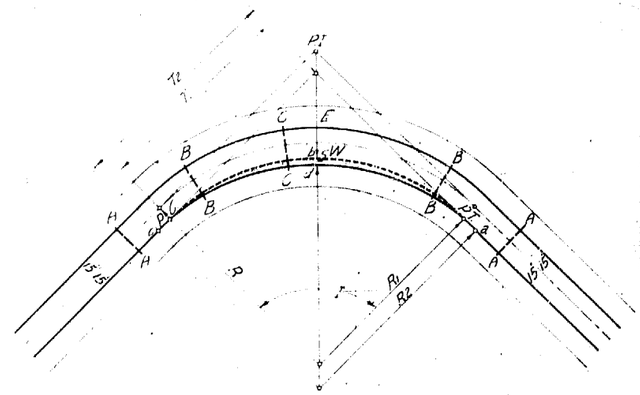


Gravel pavement to be compacted to a depth of 6"
Approximate quantity = 1556 cu. yds. per station.

TYPICAL CROSS-SECTION ON CURVES



TYPICAL PLAN OF CURVES UNDER 500 FT. RAD.



V = Variable
R1 = R-15'
E = R1 exsec $\frac{I}{2}$
R = R1 + $\frac{W}{\text{exsec } \frac{I}{2}}$
T1 = R1 tan $\frac{I}{2}$
T2 = R2 tan $\frac{I}{2}$
Area (abcd) = $\frac{\pi I}{360}$ ($R_1^2 - R_2^2$) + (R1 + R2)(T2 - T1)

Superelevation begins at section "A-A" 25' from P.C or P.T. and attains its full value at section "B-B" 50' from "A-A"

MISSOURI STATE HIGHWAY COMMISSION

ESTIMATE SHEET

Description of Paving 9' Concrete & 7' Gravel

Prepared by H.E.P & C.J.S Date Feb 2. 1927 Name of road Malden-Bernie

Co. Dunklin

Length 4.894 Miles

P.D. Road | State | Fed. Aid | Sheet No.
Dist. No. 5 | MO. 122(3)0 1927
Div. No. | County 10 Dunklin

FINAL PLANS

EARTHWORK

Station	Station	Excav	Borrow	Overhaul
0+00	7+00	73.4	1313.5	
	14+00	22.5	14075	
	21+00	53.9	12542	
	27+00	20.4	1351.9	
	35+00	205.5	1057.4	
	42+00	104.9	10746	
	49+00	193.1	10649	
	57+00	114.1	14094	
	63+00	118.5	8018	
	70+00	100.1	11001	
	77+00	64.9	11222	
	84+00	65.1	12353	
	91+00	27.1	10292	
	98+00	57.1	11073	
	105+00	57	13944	
	112+00	56	14053	
	119+20	57.2	14314	
	126+00	98	11729	466
	133+00	11.3	11740	
	140+00	37	19371	
	147+00	259	16830	
	154+00	751	15496	1512
	161+00	279	20186	
	167+00	83.5	8443	
	175+00	1537	11759	
	182+00	66.8	14963	
	189+00	70.4	13798	
	196+00	501	17186	
	203+00	195.2	12852	
	210+00	170.3	12926	
	217+00	927	12721	
	224+00	1408	10204	
	231+00	686	11690	
	238+00	151.9	600.1	
	244+50	142.9	14.9	408
	252+00	171.3		
	256+65	193.2		
	258+40	170.3		
	TOTAL	31400	439443	2386

12"X18" PRECAST CULVERTS (Sec

Station	Length	B' Conc	Rein St	Side
39+45	23	777	34	L
52+90	26	842	37	R
53+00	26	842	37	L
79+40	26	842	37	R
79+40	26	842	37	L
106+76	30	972	43	R
105+76	26	842	37	L
211+70	22	712	31	R
211+70	22	712	31	L
241+00	30	972	43	R
241+00	30	972	43	L
245+50	30	972	43	R
245+50	30	972	43	L
249+80	22	712	31	R
249+80	30	972	43	L
254+10	24	778	34	R
254+10	30	972	43	L
TOTALS	454	14.705	647	

12"X18" PRECAST CULVERTS (Fr

Station	Length	B' Conc	Rein St	Remarks
132+17	22	712	31	L
132+17	22	712	31	R
144+25	22	712	31	L
158+55	22	712	31	L
158+55	22	712	31	R
185+50	22	712	31	L
185+50	22	712	31	R
TOTAL	154	4984	217	

3'X18" PRECAST CULVERTS (Mi

Sta	Length	B' Conc	Rein St
239+00	34	1101	48
TOTAL	34	1101	48

LENGTH OF SECTION

End of Project	258+40
Beg	0+00
Apparent Length	25840'
Exceptions	0
Equations	00
Net Length	25840

9' CONCRETE PAVT

25840 x 9 = 25840 SQ YDS

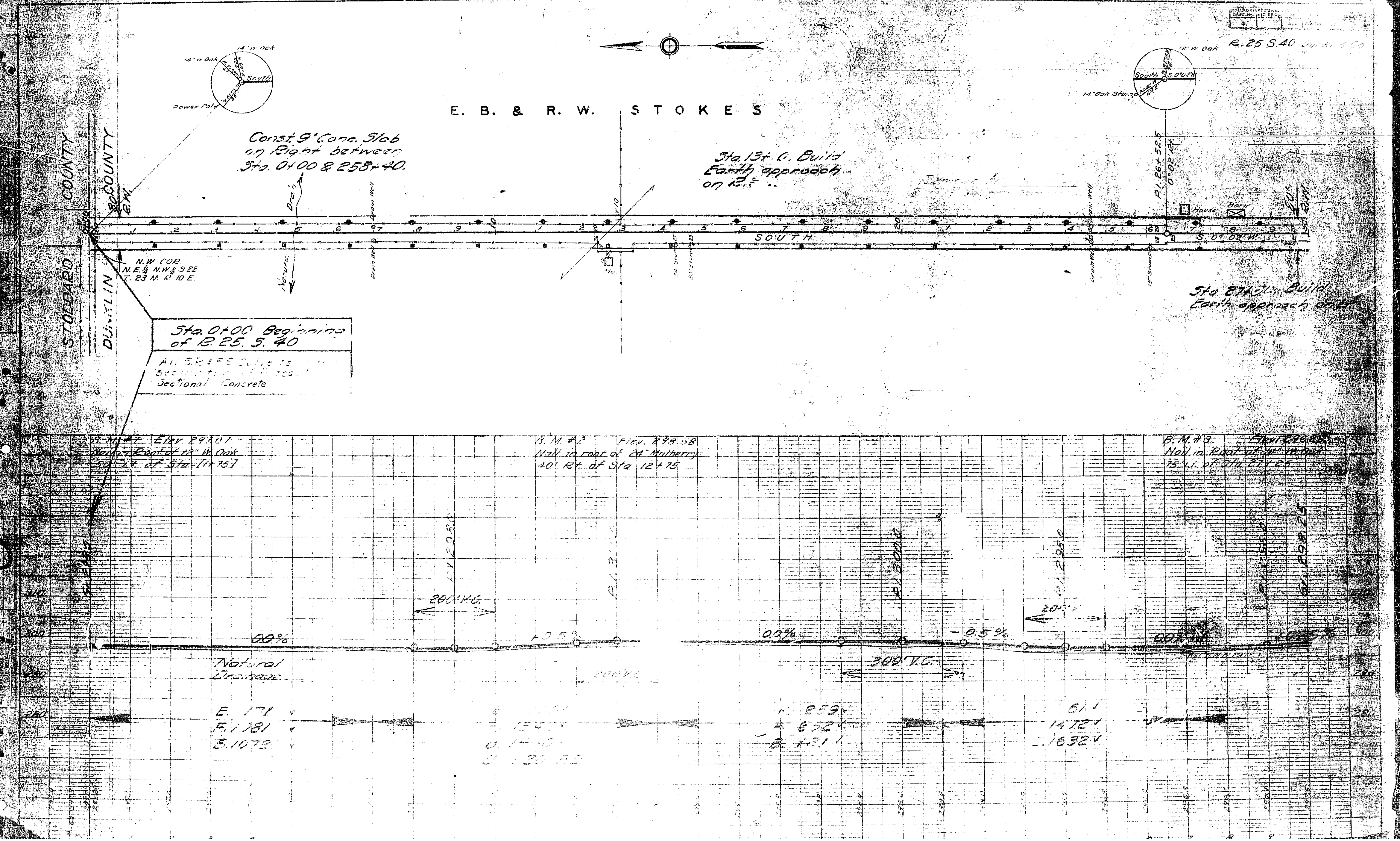
7' GRAVEL PAVEMENT

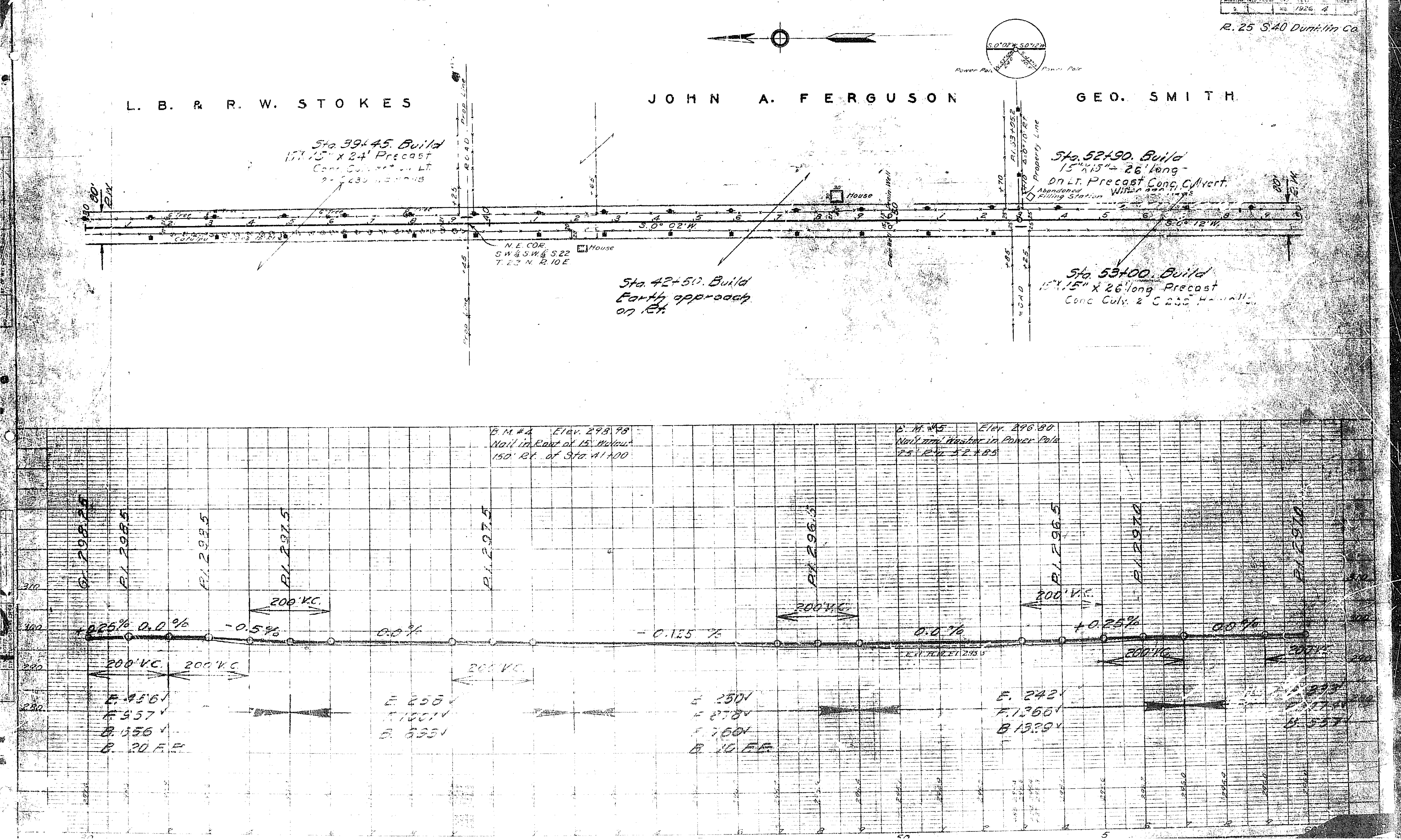
Theoretical	Actual
Gravel per Sta = 15.46 cy	31400
258.40 x 15.46 = 4021 cy	

*See list attached for Final estimate.

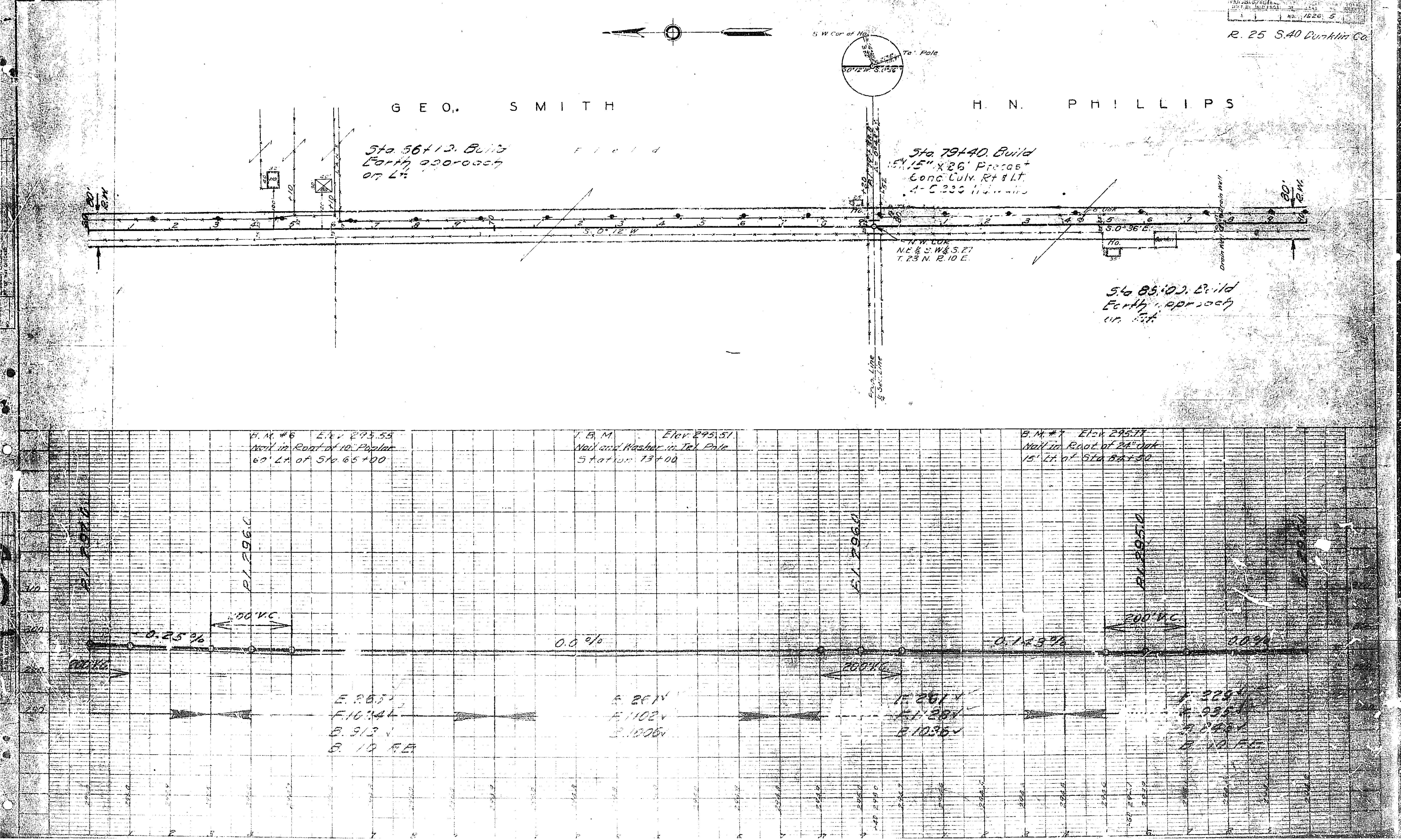
SUMMARY

Item	Description	Unit	Quant
7A	Earth Excava	cu yd	31400
7D	Borrow " "	" "	433431
7E	Overhaul	sta. yd	2386.0
7G	Rolling Embankment	day	0
12A	Gravel Pav't	cu yd	4143.0
20	Portland Cement Conc. Pavement	sq. yd.	25840.0
24A	Barricades	each	2.
24C	Relocating Barricades	"	2.
51	12"X18" Precast Sec. Conc. Culverts (3-0)	lin ft	454.
51	12"X18" " " " " (FE)	" "	154
51	12"X18" " " " " (M.I.)	" "	34
52A	9" Conc Base for " "	cu yd	20.8
60	Reinf for " "	Lb	913
	Maintenance Gravel	C Y	368


R. 25 S. 40
E. B. & R. W. STOKES
STODDARD COUNTY
DUNKLIN COUNTY
14" W Oak
Power Pole
South
Const. 9' Conc. Slab
on Right between
Sta. 0+00 & 258+40.
Drain
Drain Well
N.W. COR.
N.E.¼ N.W.¼ S 22
T. 23 N. R 10 E.
Sta. 0+00 Beginning
of R. 25. S. 40
Sectional Concrete
Sta. 13+ Build
Earth approach
SOUTH
12" W. Oak
14" Oak Stump
S. 0°02' W
P.I. 26+52.5
0°02' Rt.
House
Barn
S. 0° 02' W.
15" Stump
Sta. 27+ Build
Earth approach
B. M. #1 Elev. 297.07
Nail in Root of 12" W. Oak
50' Lt. of Sta. [1+75]
B. M. #2 Elev. 298.58
Nail in root of 24" Mulberry
40' Rt. of Sta. 12+75
B. M. #3
Nail in Root of W. Oak
75' Lt. of Sta. 27+25
310
300
290
280
200' V.C.
0.0%
+0.5%
0.0%
-0.5%
300' V.C.
Natural
Drainage
E. 171
F. 1181
B. 1072
1472
1632



R. 25 S. 40 Dunklin Co.
L. B. & R. W. STOKES
JOHN A. FERGUSON
GEO. SMITH
Sta. 39+45. Build
15"x15" x 24' Precast
Sta. 42+50. Build
Earth approach
on Rt.
Sta. 52+90. Build
15"x15" x 26' long
on Lt. Precast Conc. Culvert
Sta. 53+00. Build
15"x15" x 26' long Precast
N. E. COR.
S.W.¼ S.W.¼ S. 22
T. 23 N. R. 10 E.
House
S. 0° 02' W.
S. 0° 12' W.
ROAD
Prop. Line
Property Line
Abandoned Filling Station
Power Pole
B. M. #4 Elev. 298.98
Nail in Root of 15" Walnut
150' Rt. of Sta. 41+00
B. M. #5 Elev. 296.80
Nail and Washer in Power Pole
200' V.C.
+0.25%
0.0%
-0.5%
-0.125%
E. 456
F. 557
B. 656
B. 20 F.F.
E. 256
B. 695
E. 250
B. 10 F.F.
E. 242
F. 1366
B. 1329


R. 25 S. 40 Dunklin Co.
GEO. SMITH
H. N. PHILLIPS
S W Cor of Ho.
Tel. Pole
Sta. 56+13. Build Earth approach on Lt.
Field
Sta. 79+40. Build 15" X 26' Precast Conc. Culv. Rt & Lt. 4-C 330 Headwalls
S. 0° 12' W
S. 0° 36' E.
N.W. COR. N.E. ¼ S.W. ¼ S. 27 T. 23 N. R. 10 E.
Ho.
Drain Well
Sta. 85+00. Build Earth approach on Rt.
Fnc. Line & Sec. Line
80' R.W.
B. M. #6 Elev. 295.55 Nail in Root of 10" Poplar 60' Lt. of Sta. 65+00
T. B. M. Elev. 295.51 Nail and Washer in Tel. Pole Station 73+00
B. M. #7 Elev. 295.77 Nail in Root of 24" Oak 15' Lt. of Sta. 84+50
P.I. 296.0
P.I. 296.0
P.I. 295.0
-0.25 %
0.0 %
-0.125 %
0.0 %
200' V.C.
200' V.C.
200' V.C.
200' V.C.
E. 26??
F. 1034
B. 913
B. 10 F.E.
E. 261
F. 1102
B. 1006
E. 261
F. 1128
B. 1036
E. 229
F. 935
B. 10 F.E.

R. 25 S. 40 Dunklin Co.

S. 0° 36' E. South

Con. Fe. Post

H. N. PHILLIPS

Sta. 105+76. Build 15'X15' X 26' Precast Conc. & Conc. Hd walls

S. W. COR. S.E.¼ SW¼ SEC. T. 23 N. R. 10 E.

Brain Walls

P.I. 105+76 Δ = 0° 36' Rt.

Barn

Lot

Ho.

Garden

H. N. PHILLIPS

S. W. COR. N.E.¼ NW¼ S. 34 T. 25 N. R. 10 E.

County Line

S. 0° 36' E.

Garden

Shed

House

Store

Sta. 105+76 Build 15'X30' Precast Conc. & Conc. Hd walls

ROAD

Garden

Field

SOUTH

L. PRUITT

SEC. 27

Sec. Line

SEC. 34

B.M. #8 Elev. 294.03
Nail in Root of 18" Mulberry
75' Lt. Station 108+75

P.I. 105+50

P.I. 129+50

P.I. 129+45

P.I. 129+95

P.I. 132+50

P.I. 134+50

200' V.C.

200' V.C.

200' V.C.

200' V.C.

0.0%

-0.10%

00%

+0.10%

0.0%

-2.30%

310

300

290

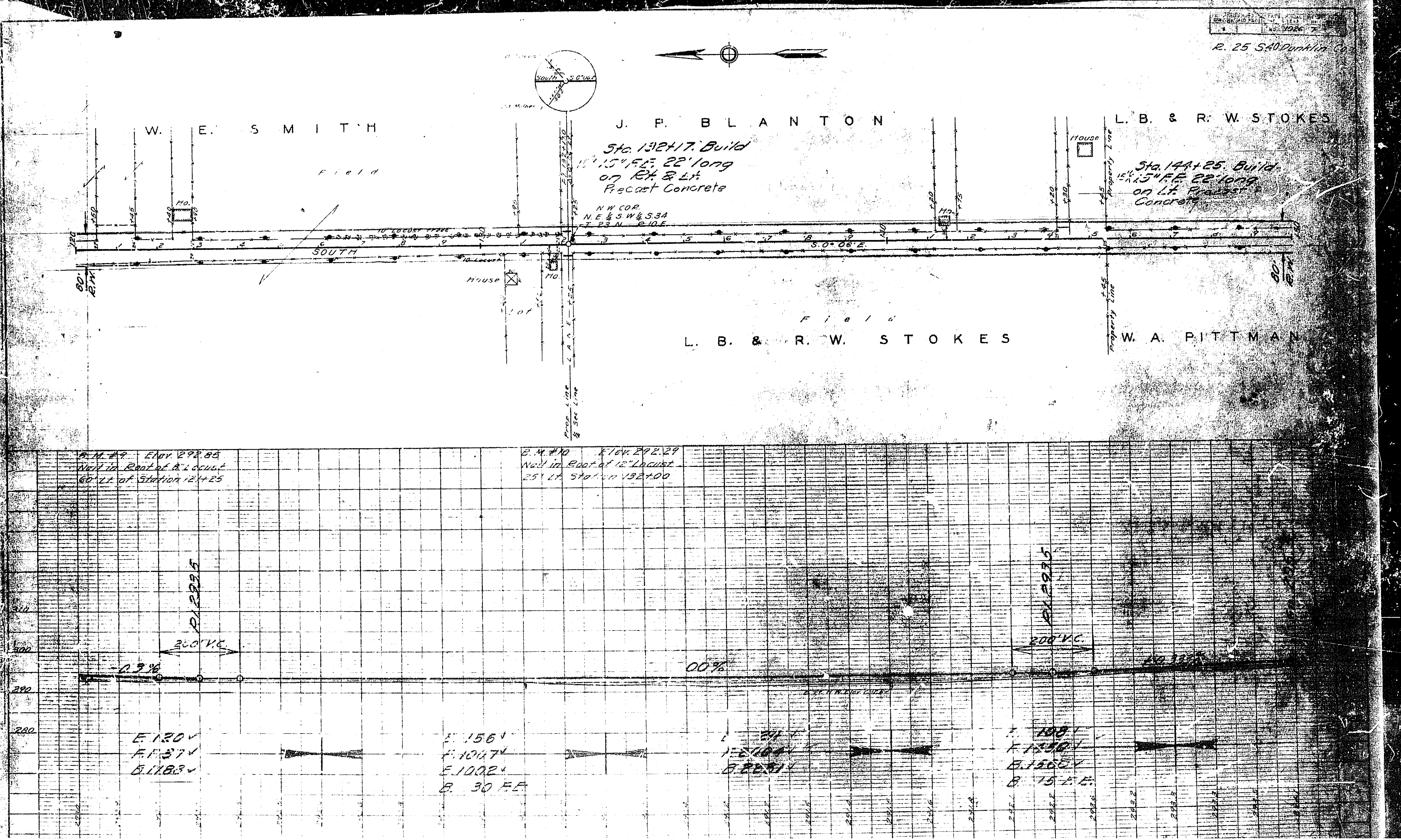
280

E. 357
N. 594
E. 739

E. 154
N. 426
E. 1254

E. 79
N. 1240
E. 1857

E. 2059
N. 497
E. 1129


R. 25 S.A.O. Dunklin Co.
W. E. SMITH
J. F. BLANTON
L. B. & R. W. STOKES
Field
Sta. 132+17. Build 15"x15" F.E. 22' long on Rt. & Lt. Precast Concrete
Sta. 144+25. Build 15"x15" F.E. 22' long on Lt. Precast Concrete
N W COR. N.E.¼ S.W.¼ S.34 T.23 N. R.10 E.
SOUTH
S.0° 06' E.
House
Ho.
Lot
Property Line
Prop. Line ¼ Sec. Line
LANE
L. B. & R. W. STOKES
W. A. PITTMAN
80' R/W
B.M.#9 Elev. 292.85 Nail in Root of 8" Locust 60' Lt. of Station 121+25
B.M.#10 Elev. 292.29 Nail in Root of 12" Locust 25' Lt. Station 132+00
P.I. 293.5
200' V.C.
-0.3%
0.0%
E. 120
F.F. 37
B. 1183
E. 156
F. 1047
F. 1002
B. 30 F.E.
B. 15 F.E.
300
290
280

R. 25 S. 10 Degree Curve

N.W. Cor. Barn
Tel. Pole

L. B. & R. W. STOKES

W. A. PITTMAN

L. B. & R. W. STOKES

Garden

Barn

House

Drain Well

Prop. Line

S. 0° 06' E.

N.E. COR
N.W.¼ N.W.¼ S 3
T. 22 N. R. 13 E

Sta. 158+55. Build
15" RCP FE 22' long
on Rt. & Lt.
Precast Concrete

W. A. PITTMAN

L. B. & R. W. STOKES

SEC. 34

T. 23 N.

T. 22 N.

SEC. 3

B.M. #12 Elev. 295.38
Nail in Root of 14" Poplar
50' Rt. of Station 161+22

B.M. #13 Elev. 295.88
Nail in Root of 20" B. Oak
15' Lt. of Station 175±00

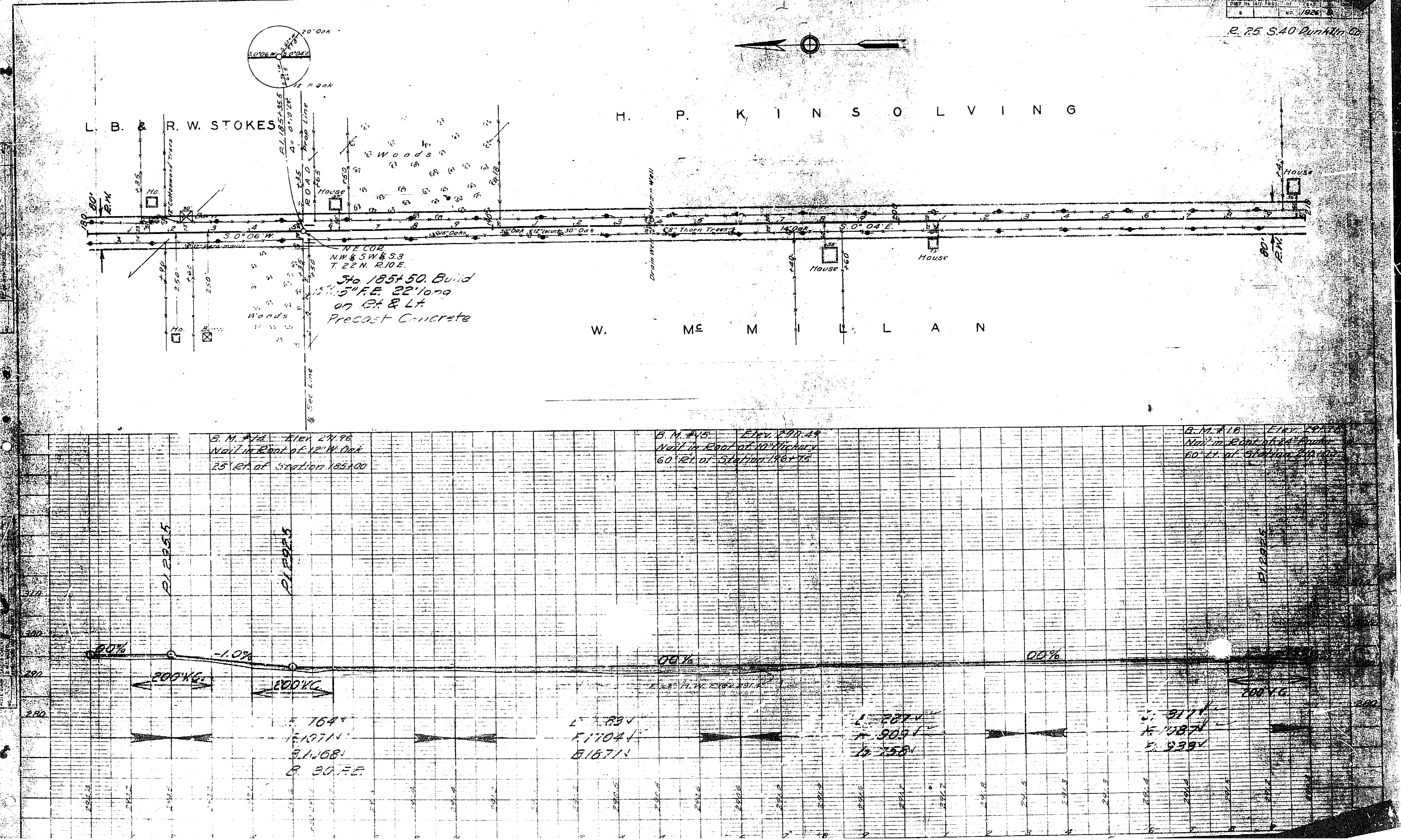
B.M. #11 Elev. 294.92
Nail in Root of 36" Poplar
Lt. of Station 151+50

F. 786 V
F. 13.57 H
B. 1295 V

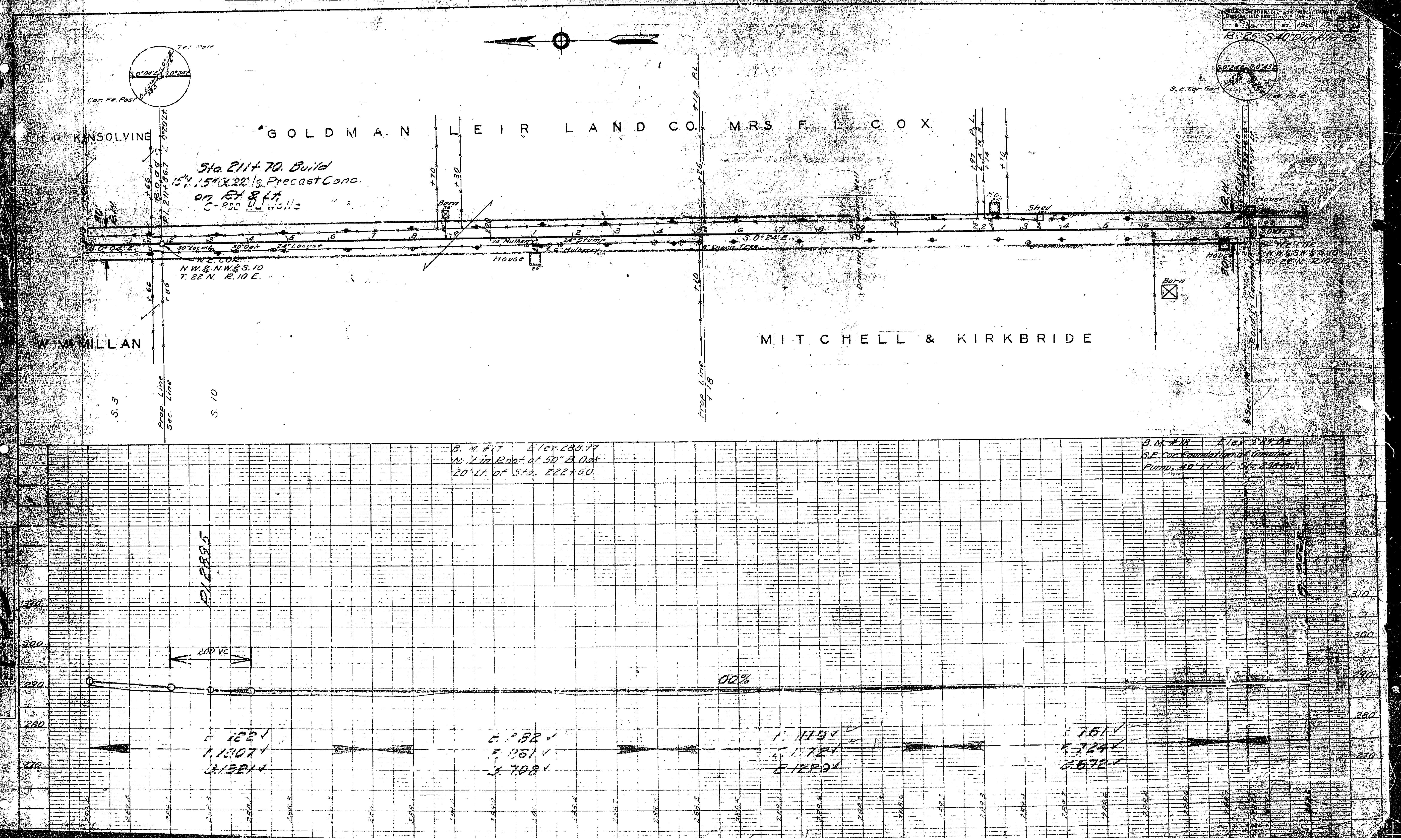
F. 231 V
F. 134.1 V
B. 30 RCP

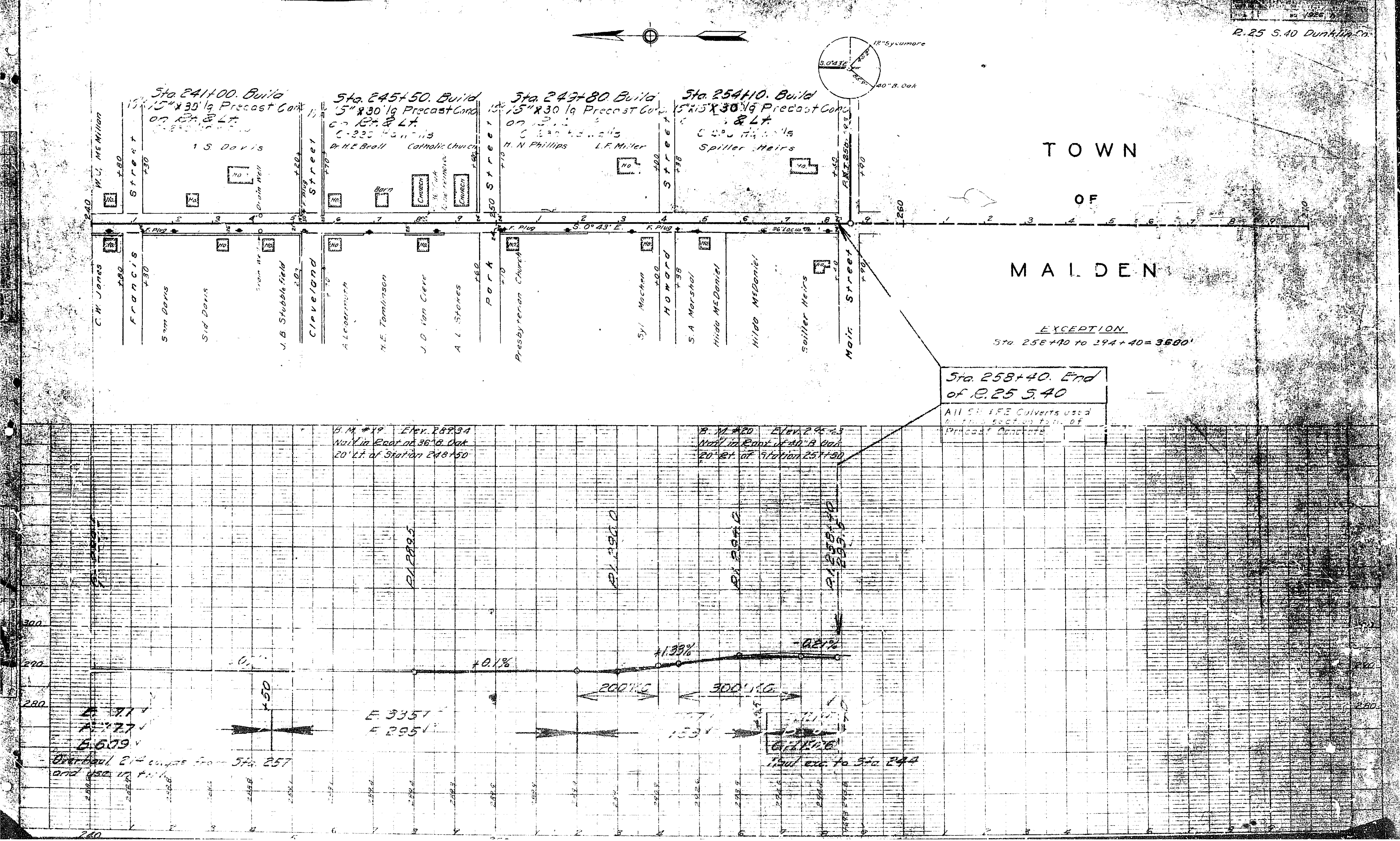
F. 1268 V
F. 1131 V
B. 1033 V

B. 193 V
F. 1450 V
B. 1371 V



R. 25 S.40 Dunklin Co.
L. B. & R. W. STOKES
H. P. KINSOLVING
W. McMILLAN
Woods
House
Ho.
Barn
ROAD
Prop. Line
S. 0° 06' W.
S. 0° 04' E.
N.E. COR. N.W.¼ S.W.¼ S.3 T. 22 N. R.10 E.
Sta. 185+50. Build 15"x5" F.E. 22' long on Rt. & Lt. Precast Concrete
Drain Well
¼ Sec Line
B. M. #14 Elev. 294.96 Nail in Root of 12" W. Oak 25' Rt. of Station 185+00
B. M. #15 Elev. 290.49 Nail in Root of 10" Hickory 60' Rt. of Station 196+75
B. M. #16 Nail in Root of 24" Pecan 60' Lt. of Station
-1.0%
.00%
200' V.C.
B. 30 F.E.


R. 25 S. 40 Dunklin Co.
H. P. KINSOLVING
GOLDMAN LEIR LAND CO.
MRS F. L. COX
W. McMILLAN
MITCHELL & KIRKBRIDE
Sta. 211+70. Build
15" x 15" x 22' lg. Precast Conc.
on Rt. & Lt.
Cor. Fe. Post
Tel. Pole
S. E. Cor. Gar.
Barn
House
Shed
S. 0° 24' E.
N. E. Cor.
N. W. ¼ N. W. ¼ S. 10
T. 22 N. R. 10 E.
N. E. Cor.
N. W. ¼ S. W. ¼ S. 10
30" Locust
30" Oak
24" Locust
24" Mulberry
24" Stump
Persimmon
Prop. Line
Sec. Line
S. 3
S. 10
B. M. # 7 Elev. 288.77
N. 1 in Root of 50" B. Oak
20' Lt. of Sta. 222+50
B. M. # 8 Elev. 289.05
S. E. Cor. Foundation of Gasoline
Pump, 40' Lt. of Sta. 238+50
P.I. 289.5
200 VC
.00%
310
300
290
280
270


R. 25 S. 40 Dunklin Co.
Sta. 241+00. Build 15"x30' lg Precast Conc on Rt. & Lt.
Sta. 245+50. Build 15"x30' lg Precast Conc on Rt. & Lt.
Sta. 249+80. Build 15"x30' lg Precast Conc
Sta. 254+10. Build 15"x15"x30' lg Precast Conc on Rt. & Lt.
12" Sycamore
40" B. Oak
S. 0°43' E.
TOWN
OF
MALDEN
W. J. McMillan
I. S. Davis
Dr. H. E. Beall
Catholic Church
H. N. Phillips
L. F. Miller
Spiller Heirs
Barn
Church
C. W. Jones
Francis Street
Sam Davis
Sid Davis
J. B. Stubblefield
Cleveland Street
H. E. Tomlinson
J. D. Van Cleve
A. L. Stokes
Park Street
Presbyterian Church
Syl. Machen
Howard Street
S. A. Marshal
Hilda McDaniel
Spiller Heirs
Main Street
F. Plug
EXCEPTION
Sta. 258+40 to 294+40 = 3600'
Sta. 258+40. End of R. 25 S. 40
All 5' & F.E. Culverts used in this section to be of Precast Concrete
B. M. #19 Elev. 289.34
Nail in Root of 36" B. Oak
20' Lt. of Station 248+50
B. M. #20 Elev. 295.43
Nail in Root of 40" B. Oak
20' Rt. of Station 257+50
P.I. 289.5
P.I. 290.0
P.I. 294.0
+0.1%
+1.33%
-0.21%
200' V.C.
300' V.C.
300
290
280
240
260
Overhaul 214 cu. yds. from Sta. 257 and use in fill
Waste exc. to Sta. 244

23
40
Dunklin
12

C-230

DESIGN DESIGNATION

A.D.T. – YEAR 1991 – 9800
A.D.T. – YEAR 2011 – 14,700
STREET WIDTH: 24', VARIES

V = 35 MPH

FINAL PLANS

MISSOURI STATE HIGHWAY AND TRANSPORTATION COMMISSION

PLANS FOR PROPOSED

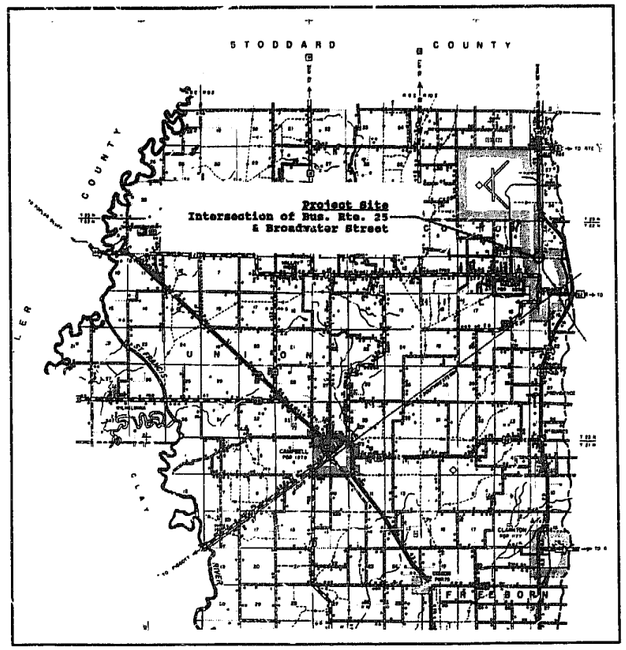
INTERSECTION IMPROVEMENTS

BUSINESS ROUTE 25 AT BROADWATER STREET

CITY OF MALDEN, MISSOURI

FEDERAL AID PROJECT

AWARDED
OCT 09 1992



VICINITY MAP

1 0 1 2 3 4 MILES
SCALE

NOTE:
THIS PROJECT SHALL BE CONSTRUCTED AS JOB NO. J0U0395 AND ALL REFERENCE TO JOB NO. 190008.00 FOUND ELSEWHERE IN THESE PLANS SHALL BE CONSIDERED VOID.

NOTE:
~~THIS PROJECT SHALL BE CONSTRUCTED AS PROJECT NO. FAM-110(001) AND ALL REFERENCE TO PROJECT NO. MO-110(001) FOUND ELSEWHERE IN THESE PLANS SHALL BE CONSIDERED VOID.~~

COUNTY DUNKLIN
CITY MALDEN
ROUTE BUSINESS ROUTE 25
PROJECT STPG-MG-4101(001)

INDEX OF SHEETS

DESCRIPTION	SHEET NO.
TITLE SHEET	1
SUMMARY (1 SHEET)	2-A
SUMMARY (2 SHEETS)	2-B
PLAN & PROFILES	3-4
TRAFFIC CONTROL PLAN	5-6
SIGNALS	7-10
CROSS-SECTIONS	11-12
Standard Plans Index	10A

LENGTH OF PROJECT

END OF PROJECT 12+88
BEGINNING OF PROJECT 1+12
APPARENT LENGTH 1,176 FT.
MILEAGE 0.22 MI.

CONSULTING ENGINEER
S. H. SMITH & CO., INC.

STATE OF MISSOURI
ALAN W. McFADDEN
NUMBER E-17736
REGISTERED PROFESSIONAL ENGINEER

PREPARED: Alan W. McFadden 3/13/91
DATE

APPROVED
MAYOR 10 June 1991
DATE

MISSOURI STATE HIGHWAY AND TRANSPORTATION COMMISSION

SUBMITTED
CHIEF ENGINEER 5-22-91
DATE

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED
DIVISION ENGINEER DATE

Sept 2004

MISSOURI HIGHWAY AND TRANSPORTATION COMMISSION

FINAL PLANS

STATE	JOB NO.	SHEET NO.
MO	JOU0395	2A
DIST NO.	PROJECT NO. STPG-MG-4101(001)	ROUTE
10	COUNTY Dunklin	25 Bus.

SUMMARY OF QUANTITIES

ITEM	DESCRIPTION	UNIT	QUANTITY

ITEM	DESCRIPTION	UNIT	QUANTITY
202-20.10	REMOVAL OF IMPROVEMENTS	LUMP SUM	1
203-55.00	EMBANKMENT IN PLACE	CU YD	600
301-10.11	ASPHALT CEMENT (BITUMINOUS BASE) AC-20	TON	49.9
301-20.00	MINERAL AGGREGATE (BITUMINOUS BASE)	TON	882
304-00.63	TYPE 2 AGGREGATE FOR BASE (C.O.#1M) (6 IN. THICK)	SQ YD	1,710
403-10.11	ASPHALT CEMENT (ASPHALTIC CONCRETE) AC-20	TON	46.3
403-10.26	MINERAL AGGREGATE (ASPHALTIC CONCRETE) (TYPE C MIX)	TON	1,006
407-10.05	TACK COAT	GALLON	1,000
601-10.00	FIELD LABORATORIES	LUMP SUM	1
609-10.10	CONCRETE CURB (6 IN. HEIGHT AND UNDER) TYPE S	LIN FT	70
612-10.30	MOVABLE BARRICADE	EACH	0
612-90.20	INSTALLING GIVE EM A BRAKE 4 FT. X 4 FT. SIGN	EACH	4
616-10.05	CONSTRUCTION SIGNS	SQ FT	196
616-10.20	CHANNELIZER (DRUM)	EACH	56
616-10.52	WARNING LIGHT, TYPE B	EACH	0
618-10.00	MOBILIZATION	LUMP SUM	1
619-10.00	PAVEMENT EDGE TREATMENT	LIN FT	1,776
620-02.24	24 IN. TYPE 1 PREFORMED YELLOW MARKER	LIN FT	146.0
620-20.00	TYPE 1 PREFORMED STOP LINE, WHITE (24 IN. WIDE)	LIN FT	74
620-50.01	TYPE 1 PREFORMED MARKING TAPE 4 IN., SOLID WHITE	100 FT	38.5
620-50.02	TYPE 1 PREFORMED MARKING TAPE 4 IN., INTERMITTENT WHITE	100 FT	0
620-50.03	TYPE 1 PREFORMED MARKING TAPE 4 IN., SOLID YELLOW	100 FT	39.7
620-53.01	PREFORMED REMOVABLE MARKING TAPE 4 IN., SOLID WHITE	100 FT	0
620-53.03	PREFORMED REMOVABLE MARKING TAPE 4 IN., SOLID YELLOW	100 FT	0
726-13.18	18 IN. CLASS III REINFORCED CONCRETE PIPE CULVERT	LIN FT	90
802-40.00	TYPE 4 MULCH (C.O.#2M)	ACRE	0
805-10.00	SEEDING	ACRE	0.5
	TRAFFIC SIGNALS		
902-02.13	SIGNAL HEAD, TYPE 3S	EACH	2
902-05.13	SIGNAL HEAD, TYPE 3B	EACH	6
902-05.15	SIGNAL HEAD, TYPE 5B	EACH	2
902-26.50	150 WATT 120 VOLT HIGH PRESSURE SODIUM LUMINAIRE	EACH	4
902-31.16	POST, TYPE CL, 16A	EACH	2
902-31.30	POST, TYPE CL, 30A	EACH	2
902-42.80	CONTROLLER ASSEMBLY HOUSING, K EYBOARD ENTRY, MODULAR BY FUNC TION, 8 PHASE DP CONTROLLER	EACH	1
902-49.42	DETECTOR, INDUCTION LOOP VEHICLE (2 CHANNEL)	EACH	3

ITEM	DESCRIPTION	UNIT	QUANTITY
902-51.25	CONDUIT, 1 1/4 IN., TRENCH	LIN FT	166
902-52.00	CONDUIT, 2 IN., TRENCH	LIN FT	75
902-52.50	CONDUIT, 2 1/2 IN., TRENCH	LIN FT	23
902-53.00	CONDUIT, 3 IN., TRENCH	LIN FT	30
902-72.00	CONDUIT, 2 IN., PUSHED	LIN FT	68
902-73.00	CONDUIT, 3 IN., PUSHED	LIN FT	70
902-82.08	CABLE, 8 AWG 1 CONDUCTOR, POWER	LIN FT	190
902-83.02	CABLE, 12 AWG 2 CONDUCTOR	LIN FT	600
902-83.07	CABLE, 12 AWG 7 CONDUCTOR	LIN FT	1,070
902-85.00	CABLE, LOOP DETECTOR, IN DUCT	LIN FT	2,220
902-85.10	CABLE, LOOP DETECTOR, LEAD-IN	LIN FT	610
902-86.30	POWER SUPPLY ASSEMBLY, TYPE 3	EACH	1
902-88.01	PULL BOX, TYPE I	EACH	4
902-91.00	BASE, CONCRETE	CU YD	10.4
	CONTINGENT ITEMS		
	ROADWAY		
501.01	ASPHALT CEMENT (BIT. PAV'T.) AC-20 (C.O.#1M)	TON	18.2
501.02	MINERAL AGGREGATE (BIT. PAV'T.) BP-1 (C.O.#1M)	TON	392
501.03	TYPE 3 MULCH (C.O.#2M)	ACRE	0.5
501.04	18" PIPE (FORCE ACCOUNT) (C.O.#3M)	DOLLAR	3,220.37
501.05	TYPE I PREFORMED MARKING TAPE, 4", INTERMITTENT YELLOW	100 FT.	1.4
501.06	DENSITY SAMPLES (BIT. BASE)	EACH	2
501.07	DENSITY SAMPLES (ASPH. CONC.)	EACH	1
501.08	A EXC. (B.W.)	C Y	390
	ACCEPTED: 4-28-94		
	RESIDENT ENGINEER: [illegible]	DATE: 4-21-93	
	PREPARED BY: J. D. Mills	DATE: 9/8/93	
	CHECKED DIST. OFFICE BY: [illegible]	DATE: [illegible]	
	DISTRICT FINAL PLANS: [illegible]	DATE: [illegible]	
	CHECKED MAIN OFFICE BY: Sandra D Be	DATE: 04/8/94	

F.A.M.-4101(001) 25 BUS. DUNKLIN

3A 30

MISSOURI HIGHWAY AND TRANSPORTATION COMMISSION

SUMMARY OF QUANTITIES

FINAL PLANS

STATE	JOB NO. J0U0395	SHEET NO
MO	STPG-	2B
DIST NO.	PROJECT NO. MG-4101(001)	ROUTE
10	COUNTY DUNKLIN	25B

REMOVAL OF IMPROVEMENTS

SHEET	STA	LOC	STA	LOC	DESCRIPTION	REMARKS
5	1+45	LT.	2+60	LT.	EXISTING DRIVEWAY/SHOULDER, RTE. 25	~ 169 S.Y.
	3+50	LT.	4+51	LT.	EXISTING DRIVEWAY/SHOULDER, RTE. 25	~ 157 S.Y.
	3+95	LT.	–	–	EXISTING 18" CMP	~ 50'
	4+59	LT.	4+97	LT.	EXISTING DRIVEWAY/SHOULDER, RTE. 25	~ 107 S.Y.
	4+70	LT.	–	–	EXISTING 18" CMP	~ 50'
	8+98	LT.	10+06	LT.	EXISTING DRIVEWAY/SHOULDER, RTE. 25	~ 164 S.Y.
	10+70	LT.	11+50	LT.	EXISTING DRIVEWAY/SHOULDER, RTE. 25	~ 85 S.Y.
	11+98	LT.	12+40	LT.	EXISTING DRIVEWAY/SHOULDER, RTE. 2	~ 45 S.Y.
5	1+14	RT.	1+57	RT.	EXISTING DRIVEWAY/SHOULDER, RTE. 25	~ 59 S.Y.
	2+25	RT.	2+66	RT.	EXISTING DRIVEWAY/SHOULDER, RTE. 25	~ 70 S.Y.
	2+76	RT.	3+14	RT.	EXISTING DRIVEWAY/SHOULDER, RTE. 25	~ 89 S.Y.
	3+58	RT.	3+74	RT.	EXISTING DRIVEWAY/SHOULDER, RTE. 25	~ 67 S.Y.
	4+28	RT.	6+90	RT.	EXISTING DRIVEWAY/SHOULDER, RTE. 25	~ 724 S.Y.
	9+16	RT.	10+41	RT.	EXISTING DRIVEWAY/SHOULDER, RTE. 25	~ 164 S.Y.
	10+65	RT.	11+40	RT.	EXISTING DRIVEWAY/SHOULDER, RTE. 25	~ 91 S.Y.
	11+95	RT.	12+72	RT.	EXISTING DRIVEWAY/SHOULDER, RTE. 25	~ 69 S.Y.
5	4+00	RT.	4+50	RT.	EXISTING DRIVEWAY/SHOULDER, BROADWATER	~ 42 S.Y.
	5+62	RT.	6+07	RT.	EXISTING DRIVEWAY/SHOULDER, BROADWATER	~ 55 S.Y.
	7+40	RT.	8+60	RT.	EXISTING DRIVEWAY/SHOULDER, BROADWATER	~ 157 S.Y.
5	4+54	LT.	6+79	LT.	EXISTING DRIVEWAY/SHOULDER, BROADWATER	~ 256 S.Y.
	+79	LT.	4+67	LT.	EXISTING DRIVEWAY/SHOULDER, BROADWATER	~ 90 S.Y.
5	5+50	LT.	5+65	LT.	EXISTING 6" VERT. CURB (CONC.)	~ 40 L.F.
7	4+15	LT.	4+21	LT.	EXISTING 6" VERT. CURB (CONC.), RTE. 25	~ 14 L.F. (WITHIN R/W)
	4+52	LT.	4+56	LT.	EXISTING 6" VERT. CURB (ASPH.), RTE. 25	~ 10 L.F. (WITHIN R/W)
	4+86	LT.	4+88	LT.	EXISTING 6" VERT. CURB (ASPH.), RTE. 25	~ 17 L.F. (WITHIN R/W)
	9+03	LT.	9+12	LT.	EXISTING 6" VERT. CURB (CONC.), RTE. 25	~ 21 L.F. (WITHIN R/W)
	9+65	LT.	9+75	LT.	EXISTING 6" VERT. CURB (CONC.), RTE. 25	~ 22 L.F. (WITHIN R/W)
7	9+36	RT.	9+54	RT.	EXISTING 6" VERT. CURB (CONC.), RTE. 25	~ 27 L.F. (WITHIN R/W)
7	5+50	RT.	5+66	RT.	EXISTING 6" VERT. CURB (CONC.), BROADWATER	~ 17 L.F. (WITHIN R/W)
	5+96	RT.	6+05	RT.	EXISTING 6" VERT. CURB (CONC.), BROADWATER	~ 16 L.F. (WITHIN R/W)
7	7+02	LT.	7+08	LT.	EXISTING 6" VERT. CURB (CONC.), BROADWATER	~ 11 L.F.
	8+08	LT.	8+14	LT.	EXISTING 6" VERT. CURB (CONC.), BROADWATER	~ 13 L.F. (WITHIN R/W)

ENTRANCES

SHEET	STA	TYPE	LOC	WIDTH FT.	'D' FT.	2' ASPH. CEM. TONS	2' CONC. AGG. TONS	4" BITUM. BASE ASPH. CEM. TONS	4" BITUM. BASE MIN. AGG. TONS	2' TYPE 'C' ASPH. MIN. AGG. 2" S.Y.	SKEW	REMARKS
5	1+67	C.E.	LT.	30'	11.5'	0.3	6.4	0.7	12.6	59		NO PIPE, RTE. 25
	2+20	C.E.	LT.	44'	12'	0.4	8.8	0.9	17.4	82		EXIST. 8" CMP (U.I.P.); RTE. 25
	3+95	C.E.	LT.	42'	18.5'	0.5	12.3	1.3	24.5	115		50 L.F. 18" CL II RCP @ 0% GR.; RTE. 25
	4+70	C.E.	LT.	30'	19'	0.4	8.8	0.9	17.5	82		40 L.F. 18" CL II RCP @ 0% GR.; RTE. 25
	9+36	C.E.	LT.	56'	15'	0.5	12.3	1.3	24.5	115		NO PIPE, RTE. 25
	11+14	C.E.	LT.	18'	14'	0.2	4.7	0.5	9.4	44		NO PIPE, RTE. 25
	1+35	C.E.	RT.	26'	13'	0.3	6.8	0.7	13.6	64		EXIST. 5' CMP (U.I.P.); RTE. 25
	2+42	C.E.	RT.	26'	13'	0.3	6.4	0.7	12.8	60		EXIST. 5' CMP (U.I.P.); RTE. 25
	2+96	C.E.	RT.	25'	19'	0.4	8.3	0.9	16.6	78		EXIST. 5' CMP (U.I.P.); RTE. 25
	3+58	C.E.	RT.	25'	18'	0.4	8.1	0.9	16.2	76		EXIST. 5' CMP (U.I.P.); RTE. 25
	4+55	C.E.	RT.	40'	20'	0.5	10.9	1.1	21.7	102		NO PIPE, RTE. 25
	4+91	C.E.	RT.	50'	20'	1.46	15.6	1.6	31.1	146	34° AHD	NO PIPE, RTE. 25
	6+45	C.E.	RT.	45'	17'	1.44	15.4	1.6	30.7	144	42° BK.	NO PIPE, RTE. 25
	9+76	C.E.	RT.	56'	18'	1.04	11.1	1.2	22.2	104		NO PIPE, RTE. 25
	11+02	C.E.	RT.	30'	15'	0.4	8.4	0.9	16.8	79		EXIST. 12" RCP (U.I.P.); RTE. 22
	12+55	C.E.	RT.	26'	12'	0.3	6.5	0.7	13.0	61		EXIST. 12" RCP (U.I.P.); RTE. 72
5	4+95	C.E.	LT.	88'	9'	0.4	10.0	1.1	20.0	94		NO PIPE, BROADWATER
	5+90	C.E.	LT.	45'	9'	0.3	6.1	0.6	12.1	57		NO PIPE, BROADWATER
	7+98	C.E.	LT.	20'	9'	0.1	3.0	0.3	6.0	28		NO PIPE, BROADWATER
	9+45	C.E.	LT.	30'	9'	0.2	4.3	0.4	8.5	40		NO PIPE, BROADWATER
	4+26	C.E.	RT.	32'	9'	0.2	4.6	0.5	9.2	43		NO PIPE, BROADWATER
	5+81	C.E.	RT.	32'	9'	0.2	4.3	0.4	8.5	40		NO PIPE, BROADWATER
	8+19	C.E.	RT.	56'	9'	0.3	6.9	0.7	13.8	65		NO PIPE, BROADWATER
					TOTALS	*	*	*	*	1770		* PAID BY MATERIAL TICKETS

CONCRETE CURB

TYPE 'S' CURB 6" HT. & UNDER

SHEET	STA	STA	LOC	L.F.	REMARKS
5,7	6+50	6+75	40' RT.	25'	SEE DETAIL, SHT. 7; RTE. 25
	7+40	7+85	25' RT.	45'	SEE DETAIL, SHT. 7; BROADWATER
			TOTALS	70'	

TYPE I PREFORMED MARKING TAPE

SHEET	STA	STA	LENGTH FT	4" INTERMITTENT WHITE (100')	4" SOLID WHITE (100')	24" SOLID WHITE LIN. FT.	4" SOLID YELLOW (100')	24" SOLID YELLOW L.F.	4" INTERMITTENT YELLOW (100')	REMARKS
5	1+12	6+45	5510		5.51					EDGE STRIPE, S.B.L., RTE. 25
5,7			283.0		2.83					EDGE STRIPE, RADII AT INTERSECTION OF RTE. 25/BROADWATER
~~5,7~~										~~EDGE STRIPE, N.W. RADIUS INTERSECTION RADIUS RTE. 25/BROADWATER~~
5	7+57	12+88	5510		5.51					EDGE STRIPE, S.B.L., RTE. 25
5	1+12	6+45	5510		5.51					EDGE STRIPE, N.B.L., RTE. 25
5,7										~~EDGE STRIPE, S.E. INTERSECTION RADIUS, RTE. 25/BROADWATER~~
5,7										~~EDGE STRIPE, N.E. INTERSECTION RADIUS, RTE. 25/BROADWATER~~
5	7+57	12+88	5510		5.51					EDGE STRIPE, N.B.L., RTE. 25
5	4+00	6+56	256.0		2.36					EDGE STRIPE, E.B.L., BROADWATER
5	7+67	10+00	233.0		2.33					EDGE STRIPE, E.B.L., BROADWATER
5	4+00	6+56	256.0		2.36					EDGE STRIPE, W.B.L., BROADWATER
5	7+67	10+00	233.0		2.33					EDGE STRIPE, W.B.L., BROADWATER
5,7	4+28	6+78	250.0		2.50					N.B. LEFT TURN LANE, RTE. 25
5,7	7+22	9+72	250.0		2.50					S.B. LEFT TURN LANE, RTE. 25
5	4+00	6+50	250.0						0.70	CENTERLINE, BROADWATER
5	7+50	10+00	250.0						0.70	CENTERLINE, BROADWATER
5,7	6+50	–	–			10				24' STOPLINE, RTE. 25, N.B. LEFT TURN LANE
5,7	6+78	–	–			12				24' STOPLINE, RTE. 25, N.B.L.
5,7	7+22	–	–			12				24' STOPLINE, RTE. 25, S.B.L.
5,7	7+50	–	–			10				24' STOPLINE, RTE. 25, S.B. LEFT TURN LANE
5,7	6+50	–	–			14				24' STOPLINE, BROADWATER, E.B.L.
5,7	7+50	–	–			16				24' STOPLINE, BROADWATER, W.B.L.
5,7	1+12	6+45	5510				18.30			MEDIAN, 2 DOUBLE LINES, RTE. 25
5,7	7+57	12+88	5510				21.40			MEDIAN, 2 DOUBLE LINES, RTE. 25
5,7	1+12	6+45	5510					58		MEDIAN, CROSSHATCHING & BULLNOSES, RTE. 25
5,7	7+57	12+88	5510					88		MEDIAN, CROSSHATCHING & BULLNOSES, RTE. 25
		TOTALS		0	38.45	74	39.70	146	1.40	
		USE/100FT.			38.5		39.7		1.4	
		USE/FT.				74		146		

PREFORMED REMOVABLE TAPE

SHEET	STA	STA	LENGTH FT	4" SOLID WHITE L.F.	4" SOLID YELLOW L.F.	REMARKS
5,6	0+38	1+12	150			EDGE STRIPES, 2 LINES, 2 APPLICATIONS, RTE. 25
5,6	12+88	14+38	150			EDGE STRIPES, 2 LINES, 2 APPLICATIONS, RTE. 25
5,6	0+38	1+12	150			CENTERLINE, 2 APPLICATIONS, RTE. 25
5,6	12+88	14+38	150			CENTERLINE, 2 APPLICATIONS, RTE. 25
		TOTALS		0	0	DID NOT USE BY PASSES
		USE/100FT.		0	0	

228.206

PLOT DR. -1.00,-0.33	DATE	REVISIONS	NO.	BY	CHK	APP.

SURVEYED BY: DATE:
DESIGNED BY: AWH DATE: 1/92
DRAWN BY: KJH DATE: 1/92
CHECKED BY: AWH DATE: 1/92
SCALE: 1"=1"
G:\DWG\MTS\MTS2B-1 01/28/92 11:19

SHSC

S. H. SMITH & CO., INC.
CONSULTING ENGINEERS–REGISTERED LAND SURVEYORS
GEOTECHNICAL EXPLORATION–MATERIALS TESTING
POPLAR BLUFF, MISSOURI CAPE GIRARDEAU, MISSOURI

SUMMARY OF QUANTITIES
BUSINESS ROUTE 25 AT BROADWATER STREET
MALDEN, MISSOURI

JOB NO. 19C008.00
REF DWG.
SHT. 2B (1 OF 2)
DWG. NO. 2350.02B(1)

SUMMARY OF QUANTITIES

D-2BS
REV JAN. 19, 1990

FINAL PLANS

STATE	JOB NO. J0U0395	SHEET NO
MO	STPG- PROJECT NO. MG-4101(001)	2B
DIST NO.	COUNTY	ROUTE
10	DUNKLIN	25B

SIGN	SIZE (INCHES)	AREA (SQ FT)	QTY	TOTAL AREA	QTY RELOC	TOTAL RELOC AREA	DESCRIPTION
WARNING SIGNS							
W01-1Lb	48X48	16.0					TURN (SYMBOL LEFT ARROW)
W01-1Rb	48X48	16.0					TURN (SYMBOL RIGHT ARROW)
W01-2Lb	48X48	16.0					CURVE (SYMBOL LEFT ARROW)
W01-2Rb	48X48	16.0					CURVE (SYMBOL RIGHT ARROW)
W01-3Lb	48X48	16.0					REVERSE TURN (SYMBOL LEFT ARROW)
W01-3Rb	48X48	16.0					REVERSE TURN (SYMBOL RIGHT ARROW)
W01-4Lb	48X48	16.0					REVERSE CURVE (SYMBOL LEFT ARROW)
W01-4Lb2	48X48	16.0					DOUBLE ARROW REVERSE CURVE (SYM LT ARROWS)
W01-4Rb	48X48	16.0					REVERSE CURVE (SYMBOL RIGHT ARROW)
W01-4Rb2	48X48	16.0					DOUBLE ARROW REVERSE CURVE (SYM RT ARROWS)
W01-6	48X24	8.0					HORIZONTAL ARROW (SYMBOL)
W01-6a	72X36	18.0					HORIZONTAL ARROW (SYMBOL)
W01-7	48X24	8.0					DOUBLE HEAD HORIZONTAL ARROW (SYMBOL)
W01-7a	72X36	18.0					DOUBLE HEAD HORIZONTAL ARROW (SYMBOL)
W01-8	18X24	3.0					CHEVRON (SYMBOL)
W03-1b	48X48	16.0					STOP AHEAD
W03-2b	48X48	16.0					YIELD AHEAD
W03-3b	48X48	16.0					SIGNAL AHEAD (SYMBOL)
W03-4b	48X48	16.0					BE PREPARED TO STOP
W04-1Lb	48X48	16.0					MERGE (SYMBOL FROM LEFT)
W04-1Rb	48X48	16.0					MERGE (SYMBOL FROM RIGHT)
W05-1a	48X48	16.0					ROAD NARROWS
W05-3a	48X48	16.0					ONE LANE BRIDGE
W06-1b	48X48	16.0					DIVIDED HIGHWAY
W06-2b	48X48	16.0					DIVIDED HIGHWAY ENDS
W06-3b	48X48	16.0					TWO WAY TRAFFIC (SYMBOL)
W06-3x	24X18	3.0					TWO WAY TRAFFIC (PLAQUE)
W08-1b	48X48	16.0					BUMP
W08-2b	48X48	16.0					DIP
W08-3	48X48	16.0					PAVEMENT ENDS
W08-4b	48X48	16.0					SOFT SHOULDER
W08-5b	48X48	16.0					SLIPPERY WHEN WET (SYMBOL)
W08-6b	48X48	16.0					TRUCK CROSSING
W08-6c	48X48	16.0					TRUCK ENT (INCLUDES W025-1b PLATE)
W08-7a	36X36	9.0					LOOSE GRAVEL
W08-9	48X48	16.0					LOW SHOULDER
W08-9La	48X48	16.0					UNEVEN PAVEMENT (SYM FOR LT DROPOFF)
W08-9Ra	48X48	16.0					UNEVEN PAVEMENT (SYM FOR RT DROPOFF)
W09-1R	48X48	16.0					RIGHT LANE ENDS (INCLUDES W025-3c PLATE)
W09-2Rc	48X48	16.0					LANE ENDS MERGE RIGHT (INCLUDES W025-3b PLATE)
W10-1A	42Dia	9.6					RAILROAD CROSSING
W012-1	24X24	4.0					DOUBLE DOWN ARROW (SYMBOL)
W012-2a	48X48	16.0					LOW CLEARANCE (SYMBOL)
W012-2x	24X18	3.0					LOW CLEARANCE (PLAQUE)
W012-3a,b	144X24	24.0					OVERHEAD LOW CLEARANCE (FEET AND INCHES)
W013-1a	24X24	4.0					ADVISORY SPEED (PLAQUE)
W020-1	48X48	16.0	2	32.0			ROAD CONST AHEAD (INCLUDES W025-6 PLATE)
W020-2	48X48	16.0					DETOUR AHEAD (INCLUDES W025-1b PLATE)
W020-3	48X48	16.0					ROAD CLOSED AHEAD (INCLUDES W025-1c PLATE)
W020-4ac	48X48	16.0	2	32.0			ONE LANE ROAD AHEAD (INCLUDES W025-1a PLATE)
W020-5	48X48	16.0					RIGHT LANE CLOSED AHEAD (INCL W025-3d PLATE)
W020-6a	48X48	16.0					RIGHT LANE CLOSED (INCLUDES W025-3c PLATE)
W020-7b	48X48	16.0	2	32.0			FLAGMAN ~~AHEAD (INCLUDES W025-1b PLATE)~~ (SYMBOL)
W020-8	36X18	4.5					WORKERS AHEAD
W020-9c	48X48	16.0	2	32.0			OPEN TRENCH
W021-2b	48X48	16.0					FRESH OIL
W021-5b	48X48	16.0					SHOULDER WORK AHEAD
W021-7	36X36	9.0					SAND BLASTING
W022-1	48X48	16.0					BLASTING ZONE 1000 FT
W022-2	42X36	10.5					TURN OFF 2-WAY RADIO
W022-3	42X36	10.5					END BLASTING ZONE
W022-5	30X30	6.3					NO PASSING ZONES UNMARKED
W025-1a	26X9						1000 FT/1500 FT Plate
W025-1b	38X9						500 FT/1000 FT Plate
W025-1c	48X48						500 FT/1000 FT Plate

SIGN	SIZE (INCHES)	AREA (SQ FT)	QTY	TOTAL AREA	QTY RELOC	TOTAL RELOC AREA	DESCRIPTION
W025-3b	30X9						LEFT Plate
W025-3c	33X9						LEFT/CENTER Plate
W025-3d	22X9						LEFT/CENTER Plate
W025-5	30X12	2.5					1/2 MILE/ 1 MILE (PLAQUE)
W025-6	28X9						RAMP/BRIDGE Plate
REGULATORY SIGNS							
R1-1b	48X48	13.25					STOP
R1-2a	48X48X48	6.93					YIELD
R1-3	20X9	1.25					4-WAY (PLAQUE)
R1-5	20X9	1.25					3-WAY (PLAQUE)
R2-1b	36X48	12.00	4	48.0			SPEED LIMIT XX 45 30MPH
R2-5	36X48	12.00					REDUCED SPEED AHEAD
R3-1b	36X48	12.00					NO RIGHT TURN
R3-2b	36X48	12.00					NO LEFT TURN
R3-3a	36X36	9.00					NO TURNS
R3-4b	36X48	12.00					NO U-TURNS
R3-7L	30X30	6.25					LEFT LANE MUST TURN LEFT
R3-7R	30X30	6.25					RIGHT LANE MUST TURN RIGHT
R4-1b	36X48	12.00					DO NOT PASS
R4-2b	36X48	12.00					PASS WITH CARE
R4-7Lb	36X48	12.00					KEEP LEFT (HORIZONTAL ARROW)
R4-7Rb	36X48	12.00					KEEP RIGHT (HORIZONTAL ARROW)
R4-17L	36X36	9.00					KEEP LEFT
R4-17R	36X36	9.00					KEEP RIGHT
R5-1	30X30	6.25					DO NOT ENTER
R5-1A	36X24	6.00					WRONG WAY
R6-1La	48X18	6.00					ONE WAY ARROW (LEFT)
R6-1Ra	48X18	6.00					ONE WAY ARROW (RIGHT)
R6-2La	24X30	5.00					ONE WAY (LEFT)
R6-2Ra	24X30	5.00					ONE WAY (RIGHT)
R11-2	48X30	10.00					ROAD CLOSED
R11-3	60X30	12.50					ROAD CLOSED XX MILES AHEAD LOCAL TRAFFIC ONLY
R11-4	60X30	12.50					ROAD CLOSED TO THRU TRAFFIC
R12-3B	36X36	9.00					TO ONCOMING TRAFFIC (PLAQUE)
R20-1	36X18	4.50					WHEN FLASHING
GUIDE SIGNS							
G020-1	60X36	15.00					ROAD CONSTRUCTION NEXT XX MILES
G020-2	60X24	10.00	2	20.0			END CONSTRUCTION
M04-8a	30X15	3.13					DETOUR (PLAQUE)
M04-9L	48X36	12.00					DETOUR (LEFT ARROW)
M04-9R	48X36	12.00					DETOUR (RIGHT ARROW)
M04-10L	48X18	6.00					DETOUR (ARROW LEFT)
M04-10R	48X18	6.00					DETOUR (ARROW RIGHT)
M04-11	24X18	3.00					DETOUR ENDS
M4-1L	21X15	2.19					ADVANCE LEFT TURN ARROW
M5-1R	21X15	2.19					ADVANCE RIGHT TURN ARROW
MISCELLANEOUS SIGNS							
M1-4	24X24	4.00					25
M3-1	24X12	2.00					NORTH
M3-3	24X12	2.00					SOUTH
M4-3	24X12	2.00					BUSINESS
–	48X18	6.00					BROADWATER WEST
–	48X18	6.00					BROADWATER EAST
616-10.05 CONSTRUCTION SIGNS TOTAL				196.0			
616-10.10 RELOCATED SIGNS TOTAL							

ITEM NUMBER	SIZE (INS)	TOTAL QTY	DESCRIPTION
616-10.20	36X18	56	CHANNELIZER (DRUM)
616-10.35	8X24		TYPE I BARRICADE (ONE RAIL)
616-10.36	8X24		TYPE II BARRICADE (TWO RAILS)
616-10.40	36X72		FLASHING ARROW PANEL
616-10.45	18X18		TYPE I OBJECT MARKER
616-10.46	6X12		TYPE II OBJECT MARKER
616-10.47	8X24		TYPE III OBJECT MARKER
616-10.50	8		FLASHING ELECTDRIC LIGHT
616-10.51	---		WARNING LIGHT TYPE A
616-10.52	---		WARNING LIGHT TYPE B
616-10.53	---		WARNING LIGHT TYPE C
616-10.54	---		STROBE LIGHT
616-10.60	---		RAISED PAVEMENT MARKER
616-10.70	28		FLEXIBLE DELINEATOR
[redacted]	[redacted]		[redacted]
612-10.30	72X144		MOVEABLE BARRICADE (THREE RAILS)
612-90.20	4X4	4	GIVE EM A BRAKE
619-10.00	LIN. FT.	1776	PAVEMENT EDGE TREATMENT

383 307

PLOT OR: -1.06,-0.33

DATE	REVISIONS	NO.	BY	CHK.	APP.

SURVEYED BY: DATE:
DESIGNED BY: AWM DATE: 1/92
DRAWN BY: KJH DATE: 1/92
CHECKED BY: AWM DATE: 1/92
SCALE: 1"=1'
G:\DWG\MTS\MTS2B-2 01/28/92 12:08

SHSC

S. H. SMITH & CO., INC.
CONSULTING ENGINEERS-REGISTERED LAND SURVEYORS
GEOTECHNICAL EXPLORATION-MATERIALS TESTING
POPLAR BLUFF, MISSOURI CAPE GIRARDEAU, MISSOURI

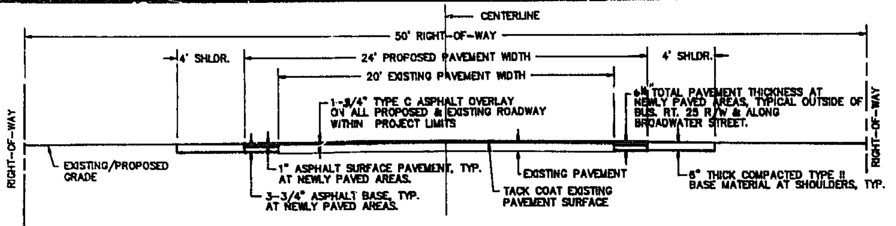
SUMMARY OF QUANTITIES
BUSINESS ROUTE 25 AT BROADWATER STREET
MALDEN, MISSOURI

JOB NO. 190008.00
FIELD BOOK
SHEET 2B (2 OF 2)
DWG. NO. 2350.02B(2)

FINAL PLANS

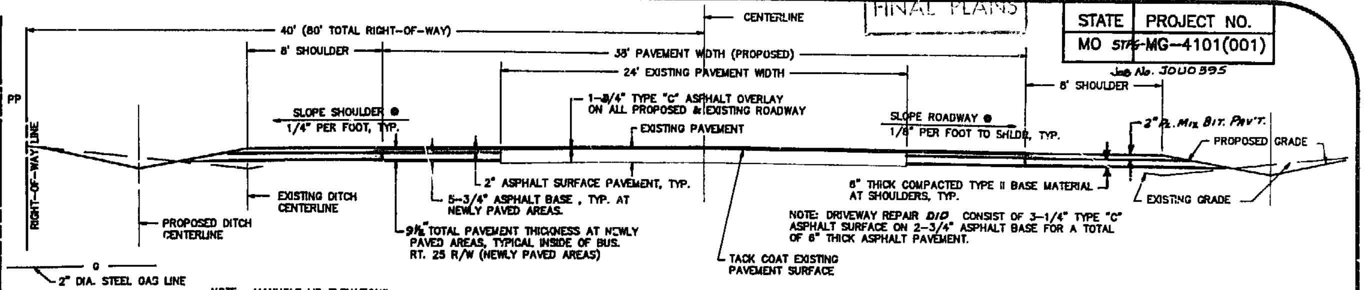
STATE	PROJECT NO.
MO	STPG-MG-4101(001)

Job No. 3000395



TYPICAL ROADWAY SECTION ALONG BROADWATER STREET

SCALE: 1"=5'



NOTE: DRIVEWAY REPAIR DID CONSIST OF 3-1/4" TYPE "C" ASPHALT SURFACE ON 2-3/4" ASPHALT BASE FOR A TOTAL OF 6" THICK ASPHALT PAVEMENT.

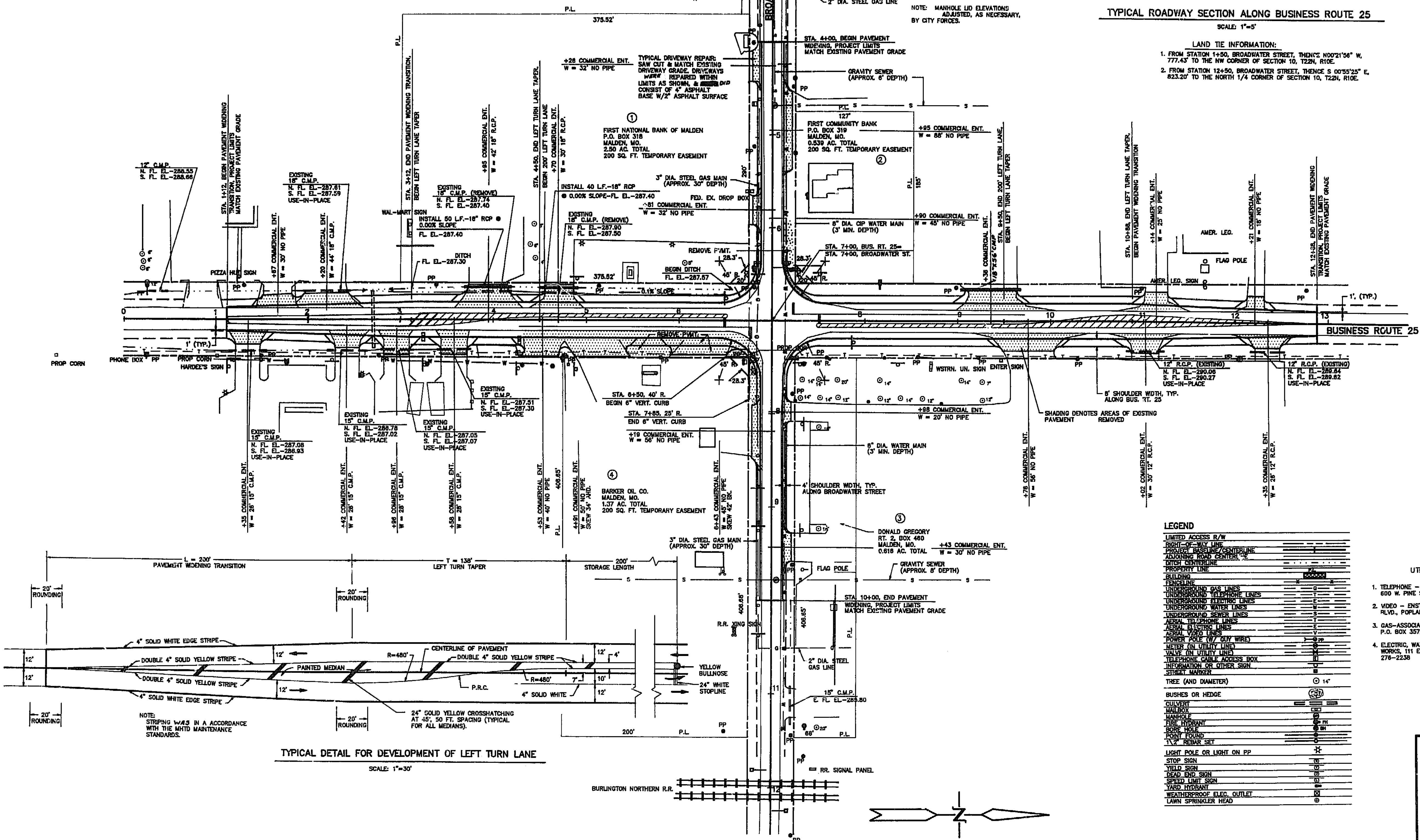
TYPICAL ROADWAY SECTION ALONG BUSINESS ROUTE 25

SCALE: 1"=5'

NOTE: MANHOLE LID ELEVATIONS ADJUSTED, AS NECESSARY, BY CITY FORCES.

LAND TIE INFORMATION:

1. FROM STATION 1+50, BROADWATER STREET, THENCE N00°21'56" W, 777.43' TO THE NW CORNER OF SECTION 10, T22N, R10E.
2. FROM STATION 12+50, BROADWATER STREET, THENCE S 00°55'25" E, 823.20' TO THE NORTH 1/4 CORNER OF SECTION 10, T22N, R10E.



NOTE: STRIPING WAS IN A ACCORDANCE WITH THE MHTD MAINTENANCE STANDARDS.

TYPICAL DETAIL FOR DEVELOPMENT OF LEFT TURN LANE

SCALE: 1"=30'

LEGEND

LIMITED ACCESS R/W	
RIGHT-OF-WAY LINE	
PROJECT BASELINE/CENTERLINE	
ADJOINING ROAD CENTERLINE	
DITCH CENTERLINE	
PROPERTY LINE	P.L.
BUILDING	
FENCELINE	x
UNDERGROUND GAS LINES	G
UNDERGROUND TELEPHONE LINES	T
UNDERGROUND ELECTRIC LINES	E
UNDERGROUND WATER LINES	W
UNDERGROUND SEWER LINES	S
AERIAL TELEPHONE LINES	T
AERIAL ELECTRIC LINES	E
AERIAL VIDEO LINES	V
POWER POLE (W/ GUY WIRE)	PP
METER (IN UTILITY LINE)	
VALVE (IN UTILITY LINE)	
TELEPHONE CABLE ACCESS BOX	
INFORMATION OR OTHER SIGN	
STREET MARKER	
TREE (AND DIAMETER)	⊙ 14"
BUSHES OR HEDGE	
CULVERT	
MAILBOX	
MANHOLE	
FIRE HYDRANT	FH
BORE HOLE	BH
POINT FOUND	
1/2" REBAR SET	
LIGHT POLE OR LIGHT ON PP	
STOP SIGN	
YIELD SIGN	
DEAD END SIGN	
SPEED LIMIT SIGN	
YARD HYDRANT	
WEATHERPROOF ELEC. OUTLET	⊠
LAWN SPRINKLER HEAD	⊕

UTILITY INFORMATION:

1. TELEPHONE – SOUTHWESTERN BELL TELEPHONE, 600 W. PINE ST., POPLAR BLUFF, MO., 686-1152
2. VIDEO – ENSTAR CABLE, 2723 N. WESTWOOD BLVD., POPLAR BLUFF, MO., 785-3973
3. GAS-ASSOCIATED NATURAL GAS, P.O. BOX 357, MALDEN, MO., 276-2284
4. ELECTRIC, WATER & SEWER – BOARD OF PUBLIC WORKS, 111 E. LACLEDE ST., MALDEN, MO. 63863, 276-2238

STATE OF MISSOURI — ALAN W. FACDON — NUMBER E-17736 — REGISTERED PROFESSIONAL ENGINEER

304 208

MTSROTI LAST UPDATED 1/28/92 PLOT OR. -0.88,-0.33	6-26-91	ADD UTILITY INFO.	1	JLF	RSI	RSI
	12/19/91	ADD ENTRANCE NOTES	2	KJH	RSI	RSI
	DATE		NO.	BY	CHK.	APP.

SURVEYED BY:		DATE:
DESIGNED BY:	DHL	DATE: 10/90
DRAWN BY:	KJH	DATE: 10/90
CHECKED BY:	DHL	DATE: 10/90
SCALE:	1"=30'	
GRAPHIC SCALE:		

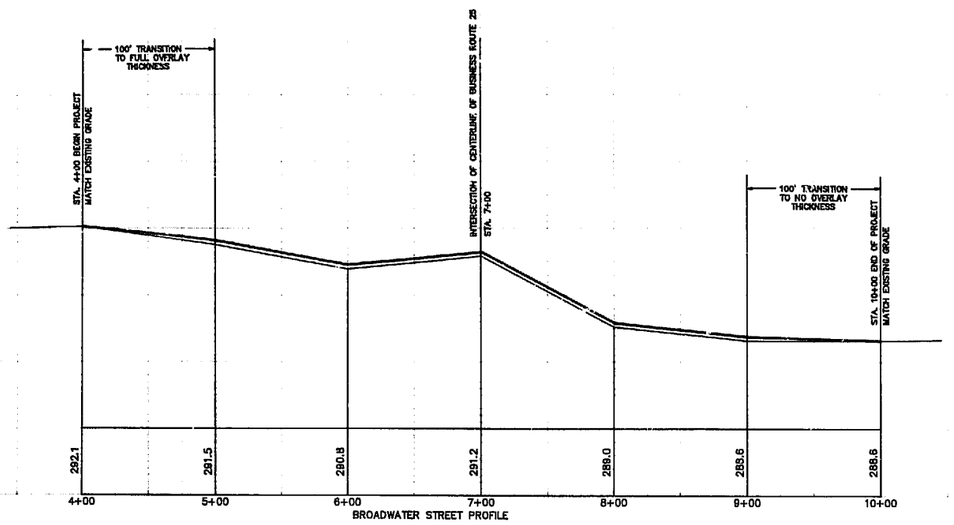
SHSC

S. H. SMITH & CO., INC.
CONSULTING ENGINEERS–REGISTERED LAND SURVEYORS
GEOTECHNICAL EXPLORATION–MATERIALS TESTING
POPLAR BLUFF, MISSOURI CAPE GIRARDEAU, MISSOURI

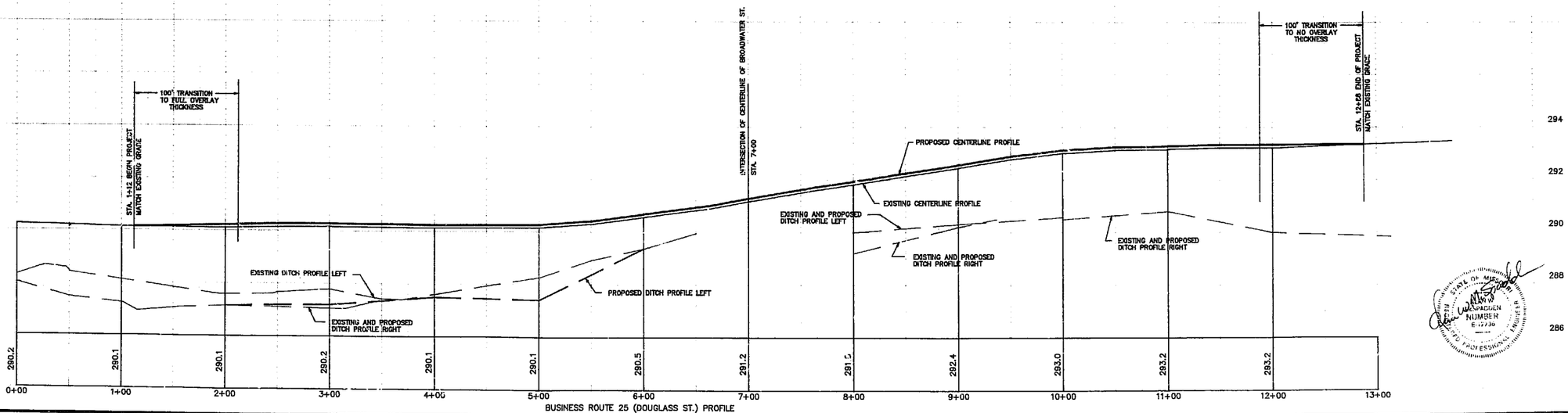
PROJECT PLAN SHEET
BUSINESS ROUTE 25 AT BROADWATER STREET
MALDEN, MISSOURI

JOB NO.	190008.00
FIELD BOOK	
SHEET	3 OF 12
DWG. NO.	2350.03

FINAL PLANS



BROADWATER STREET PROFILE



BUSINESS ROUTE 25 (DOUGLASS ST.) PROFILE

STATE OF MISSOURI
JOHN WILLIAM SMITH
REGISTERED NUMBER E-17736
PROFESSIONAL ENGINEER

395 39

PLOT OR. -0.55,-0.19

NO.	DATE	REVISIONS	BY	CHK	APP.

SURVEYED BY:
DESIGNED BY: RSI — DATE: 12/31
DRAWN BY: KJH — DATE: 12/91
CHECKED BY: AWM — DATE: 12/91
SCALE: 1"=50' H., 1"=2' V.
G:\DWG\MTS\MTSELEV 01/21/92 13:27

SHSC

S. H. SMITH & CO., INC.
CONSULTING ENGINEERS—REGISTERED LAND SURVEYORS
GEOTECHNICAL EXPLORATION—MATERIALS TESTING
POPLAR BLUFF, MISSOURI CAPE GIRARDEAU, MISSOURI

PROFILE BUSINESS ROUTE 25 & BROADWATER
MALDEN TRAFFIC SIGNALS
MALDEN, MISSOURI

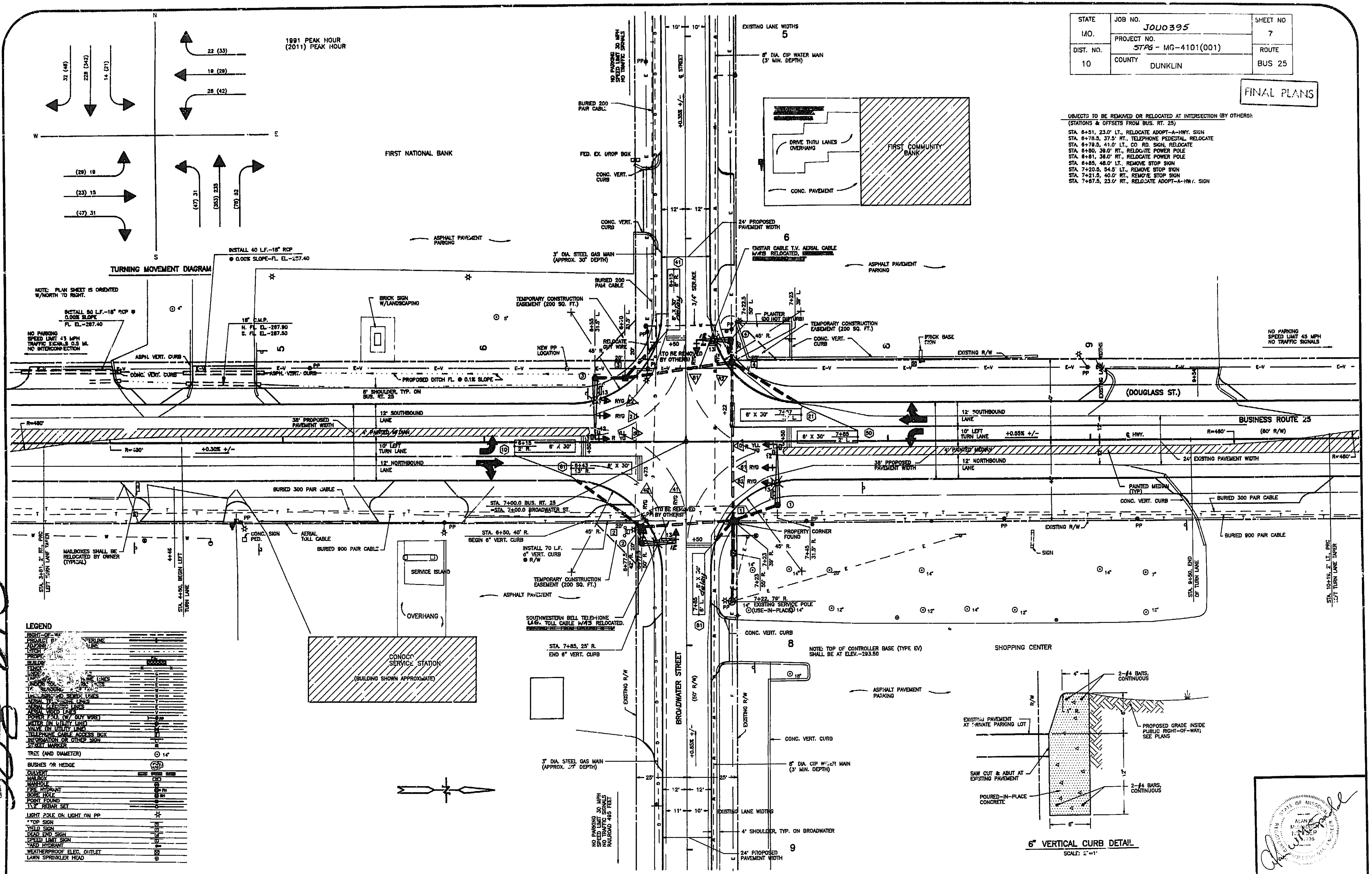
JOB NO. 30003395
FIELD BOOK
SHEET 4 OF 12
DWG. NO. 2350.04

STATE	JOB NO.	SHEET NO.
MO.	J0U0395	7
DIST. NO.	PROJECT NO. STPG - MG-4101(001)	ROUTE
10	COUNTY DUNKLIN	BUS 25

FINAL PLANS

OBJECTS TO BE REMOVED OR RELOCATED AT INTERSECTION (BY OTHERS):
(STATIONS & OFFSETS FROM BUS. RT. 25)

STA. 6+51, 23.0' LT., RELOCATE ADOPT-A-HWY. SIGN
STA. 6+78.5, 37.5' RT., TELEPHONE PEDESTAL, RELOCATE
STA. 6+79.5, 41.0' LT., CO RD. SIGN, RELOCATE
STA. 6+80, 39.0' RT., RELOCATE POWER POLE
STA. 6+81, 38.0' RT., RELOCATE POWER POLE
STA. 6+85, 48.0' LT., REMOVE STOP SIGN
STA. 7+20.5, 54.5' LT., REMOVE STOP SIGN
STA. 7+21.5, 40.0' RT., REMOVE STOP SIGN
STA. 7+87.5, 23.0' RT., RELOCATE ADOPT-A-HWY. SIGN



1	2-26-91	ADD UTILITY INFO.	JLF	RSI	RSI	
	DATE	REVISIONS	NO.	BY	CHK.	APP.

SURVEYED BY: / DESIGNED BY: DHL DATE: 11/90 / DRAWN BY: KH DATE: 10/90 / CHECKED BY: DHL DATE: 11/90 / SCALE: 1"=20' / GRAPHIC SCALE

SHSC

S. H. SMITH & CO., INC.
CONSULTING ENGINEERS—REGISTERED LAND SURVEYORS
GEOTECHNICAL EXPLORATION—MATERIALS TESTING
POPLAR BLUFF, MISSOURI CAPE GIRARDEAU, MISSOURI

TRAFFIC SIGNAL PLAN SHEET
BUSINESS ROUTE 25 AT BROADWATER STREET
MALDEN, MISSOURI

JOB NO. 190008.00
FIELD BOOK
SHEET 7 OF 12
DWG. NO. 2350.07

REV SEP 6, 89

FINAL PLANS

STATE	JOB NO. J0U0395	SHEET NO.
MO	PROJECT NO. STPG-MG-410(001)	8
DIST NO.	COUNTY DUNKLIN	ROUTE
10		BUS 25

CONTROLLER ASSEMBLY AND AUXILIARY EQUIPMENT

LOCATION			ACTUATED	SOLID STATE PRE-TIMED			ON-OFF SWITCH		COORDINATION UNIT *			TONE UNIT *		TIME CLOCK *
APPROACH	STATION	OFFSET	NEMA * KEYBORD ENTRY	TYPE			TYPE		MASTER	LOCAL	TIME BASE	TRANS-MITTER	RECEIVER	
				S-M	S-S	S-N	I	II						
BUSINESS ROUTE 25	7+23	55 RT.	\ 8 PHASE											

POWER SUPPLY

LOCATION			POWER SUPPLY ASSEMBLY		CIRCUIT BREAKER TRIP RATING				SERVICE POLE		
APPROACH	STATION	OFFSET	DRAWING 902.15	DRAWING	SIDE OF CONTROLLER	CONTROLLER		SERVICE POLE		CONTRACT FURNISH	CITY OF MALDEN UTILITY COMPANY
					LIGHTING BREAKER	AUXILIARY BREAKER	CONT & SIGNAL LAMPS	MAIN BREAKER			
BUS. ROUTE 25	7+22	79' RT.	Type 3		15 Amps	15 Amps	30 Amps	40 Amps	CL. Ft.		EXISTING
			Type		Amps	Amps	Amps	Amps	CL. Ft.		

| POST NUMBER | PULL BOX NUMBER | DETECTOR NUMBER | LOCATION APPROACH | STATION | OFFSET | BASES A 5 | A 8 | A 8 MOD | B 10 | B 5 | B 8 | B 10 | C | CUBIC YARDS OF CONCRETE | PULL BOX TYPE I | PULL BOX TYPE II | DETECTOR PUSH BUTTON | DETECTOR MAGNETIC | DETECTOR INDUCTION LOOP | DETECTOR CALL UNIT | DETECTOR TIME DELAY UNIT * | POST TOP MOUNT 7 | POST TOP MOUNT 10 | TYPE C & CL ARM LENGTH A | A | A | A | A | TYPE C & CL SIGNAL SPACING B | C | D | TYPE C & CL SIGN SPACING B | C | D | TYPE B & BL ARM LENGTH E | K | E | K | E | K | E | K | LEFT ARM E SIGNAL F | G | H | LEFT ARM E SIGN F | G | H | RIGHT ARM K SIGNAL L | M | N | RIGHT ARM K SIGN L | M | N | INCLUDED ANGLE | LUMINAIRE BRACKET ARM (FEET) 4 | 6 | 8 | 10 | 12 | 15 | SPAN WIRE WOOD | SPAN WIRE STEEL | COMMISSION FURNISHED SIGNS CODE SIGN NUMBER FROM STANDARD PLAN 902.80 3 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---

REV SEP 1, 94

FINAL PLANS

STATE	JOB NO. J0U0395	SHEET NO.
MO	PROJECT NO. STAS- MG-4101(001)	9
DIST NO.	COUNTY	ROUTE
10	DUNKLIN	BUS 25

CONDUIT

FROM	TO	CTR TO CTR DISTANCE	TRENCH 1-1/4	TRENCH 1-1/2	TRENCH 2	TRENCH 2-1/2	TRENCH 3	TRENCH 3-1/2	TRENCH 4	MEDIAN 1-1/4	MEDIAN	MEDIAN	PUSHED 2	PUSHED 2-1/2	PUSHED 3	PUSHED 3-1/2	PUSHED 4	ON BRIDGE	ON BRIDGE	REMARKS
⊠	⊠	24	27'																	PROVIDE ADDITIONAL 1-1/4" CONDUIT ON THE SERVICE HOLE AS REQUIRED
⊠	1	16				23'	13'													
1	①	24			27'															
1	2	46			17'								28'							
1	4	78					7'								70'					
1	EDGE PVMT.	13	13'																	
2	②	8	11'																	
2	EDGE PVMT.	39	39'																	
4	3	54			13'								40'							
4	④	11	14'																	
4	EDGE PVMT.	38	38'																	
3	③	15			18'															
3	EDGE PVMT.	24	24'																	
TOTALS			166'		75'	23'	30'						68'		70'					

CABLE

FROM	TO	CTR TO CTR DISTANCE	POWER 1c #8	CONTROL 2c #12	CONTROL 3c #12	CONTROL 5c #12	CONTROL 7c #12	CONTROL 12c #12	DET. LOOP 1c #14	DET. LOOP LEAD-IN CABLE	REMARKS
⊠	⊠	24	192'								3-1c POWER CABLES
⊠	①	40		91'			228'				1-2c, 42-7c CABLES
⊠	②	70		125'			162'				1-2c, 8 1-7c CABLES
⊠	③	163		226'			498'				1-2c, 42-7c CABLES
⊠	④	105		160'			197'				1-2c & 1-7c CABLES
⊠	1	16								32'	1-2c LEAD-IN CABLES
⊠	2	52								168'	2-2c LEAD-IN CABLES
⊠	3	148								176'	1-2c LEAD-IN CABLES
⊠	4	94								232'	2-2c LEAD-IN CABLES
1	⑧	21							318'		
2	⑥	43							362'		
2	⑩	73							424'		
3	④	32							340'		
4	②	43							360'		
4	⑤	72							418'		
TOTALS			192'	602'			1073'		2222'	608'	
TOTALS			190'	600'			1070'		2220'	610'	

BUSINESS ROUTE 25 (DOUGLASS STREET)
AND BROADWATER STREET
INTERSECTION

D-37B

3A8 313

DATE	REVISIONS	NO.	BY	CHK.	APP.

SURVEYED BY:
DESIGNED BY: RSI
DRAWN BY: KJH
CHECKED BY: RSI
SCALE: NONE
GRAPHIC SCALE:

DATE:
DATE: 5-91
DATE: 5-91
DATE: 5-91

SHSC

S. H. SMITH & CO., INC.
CONSULTING ENGINEERS—REGISTERED LAND SURVEYORS
GEOTECHNICAL EXPLORATION—MATERIALS TESTING
POPLAR BLUFF, MISSOURI CAPE GIRARDEAU, MISSOURI

TRAFFIC SIGNAL QUANTITY SHEET NO. 2
BUSINESS ROUTE 25 AT BROADWATER STREET
MALDEN, MISSOURI

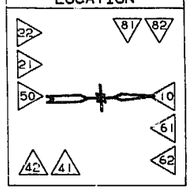
JOB NO. 190006.00
FIELD BOOK
SHEET 9 OF 12
DWG. NO. 2350.09

FINAL PLANS

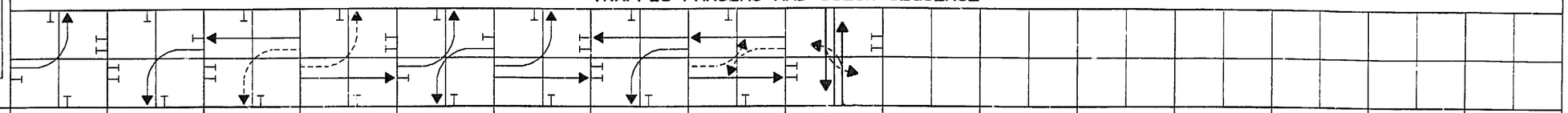
REV DEC 10, 89

STATE	JOB NO. J0U0395	SHEET NO.
MO	PROJECT NO. STPG- MG-4101(001)	10
DIST NO.		ROUTE
10	COUNTY DUNKLIN	BUS 25

SIGNAL FACE LOCATION

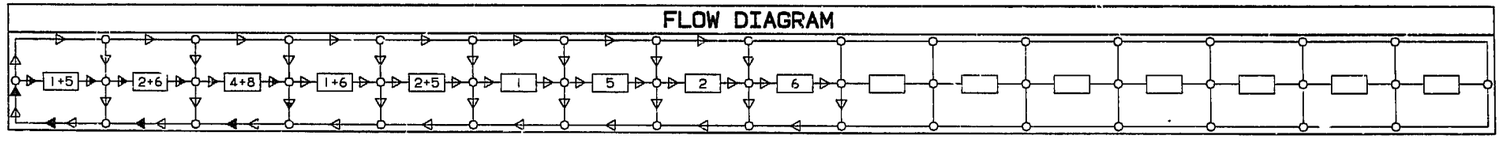


TRAFFIC PHASING AND COLOR SEQUENCE

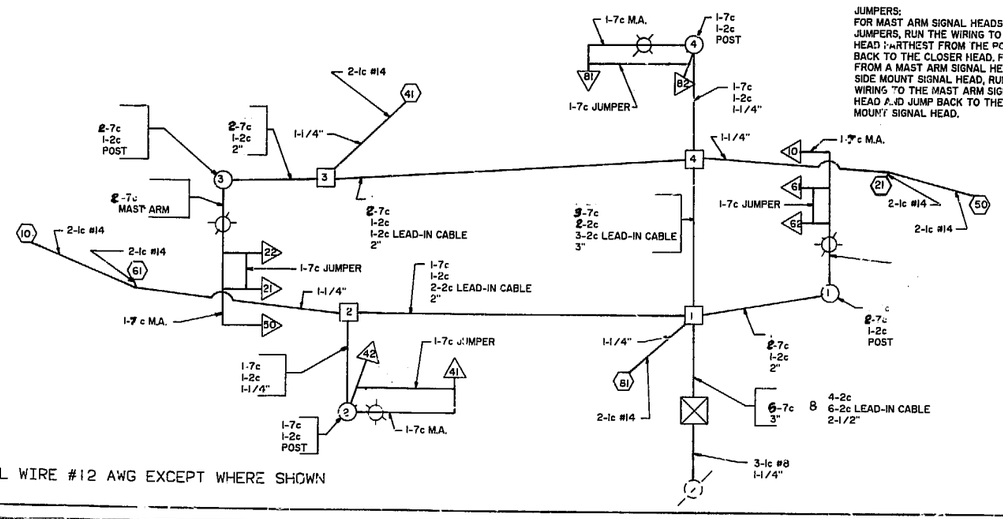


CONT. NO.			PHASE 1	PHASE 5	PHASE 2	PHASE 6	PHASE 1 + 5	PHASE 1 + 6	PHASE 2 + 5	PHASE 2 + 6	PHASE 4 + 8	PHASE	PHASE	PHASE	PHASE	PHASE	PHASE	PHASE	
APPROACH	PHASE	FACE NO.	CLEAR TO PHASE	CLEAR TO PHASE	CLEAR TO PHASE	CLEAR TO PHASE	CLEAR TO PHASE	CLEAR TO PHASE	CLEAR TO PHASE	CLEAR TO PHASE	CLEAR TO PHASE	CLEAR TO PHASE	CLEAR TO PHASE	CLEAR TO PHASE	CLEAR TO PHASE	CLEAR TO PHASE	CLEAR TO PHASE	CLEAR TO PHASE	FACE NO.
NORTH BOUND	1	10	LY LY LY LY L LY LY LY R R R R R R R R	R R R R R R R R	G Y Y G Y G Y	L LY LY LY LY L LY LY	L LY LY LY LY L LY LY	R R R R R R R	G Y Y G Y G Y	R R									10
			R R R R R R R R		Y	R R R R R R R R	R R R R R R R R			Y Y									
	6	61&62	R R R R R R R R	R R R R R R R R	G Y Y Y G Y G Y	R R R R R R R R	R R R R R R R R	R R R R R R R	G Y Y G Y G Y	G Y Y Y G Y Y	R R								61&62
SOUTH BOUND	5	50	R R R R R R R R	L LY LY LY L LY L LY	G Y Y G Y G G Y	R R R R R R R	L LY L LY LY L LY LY	R R R R R R R	L LY LY L LY LY	G Y G G Y G Y	R R								50
				R R R R R R R R	Y		R R R R R R R R			Y Y									
	2	21&22	R R R R R R R R	R R R R R R R R	G Y Y Y Y G G Y	R R R R R R R	R R R R R R R R	R R R R R R R	G Y G Y Y Y G Y	G Y Y Y Y G Y	R R								21&22
EAST BOUND																			
	4	41&42	R R R R R R R R	R R R R R R R R	R R R R R R R R	R R R R R R R	R R R R R R R R	R R R R R R R	R R R R R R R	R R R R R R R	G Y								41&42
WEST BOUND																			
	8	81&82	R R R R R R R R	R R R R R R R R	R R R R R R R R	R R R R R R R	R R R R R R R R	R R R R R R R	R R R R R R R	R R R R R R R	G Y								81,&82

FLOW DIAGRAM



WIRING DIAGRAM



PHASE ON RECALL WITH EQUAL TIME SETTINGS.

SKIP PHASE.

COMBINED RECALL & SKIP PHASE.

IF CALLED, ALL NON-CONFLICTING PHASES SHALL COMBINE AND TIME CONCURRENTLY. TIMING TO BE DETERMINED BY THE ENGINEER AT SIGNAL TURN ON.

FLASHING OPERATION	
ALL APPROACHES	FR
CONTROLLER TYPE	8 Ø

LEGEND

- ACTUATED VEHICULAR MOVEMENT
- PARTIALLY RESTRICTED ACTUATED MOVEMENT
- NON-ACTUATED VEHICULAR MOVEMENT
- PARTIALLY RESTRICTED NON-ACTUATED VEHICULAR MOVEMENT
- ACTUATED PEDESTRIAN MOVEMENT
- NON-ACTUATED PEDESTRIAN MOVEMENT
- VEHICLE STOPPED
- FDW — FLASHING DON'T WALK
- R/W — RIGHT OF WAY INTERVAL
- DW — DON'T WALK
- YRt — YELLOW RIGHT ARROW
- RT. — GREEN RIGHT ARROW
- W — WALK
- LY -YL — YELLOW LEFT ARROW
- L — GREEN LEFT ARROW
- S — GREEN STRAIGHT AHEAD ARROW
- G — CIRCULAR GREEN
- Y — CIRCULAR YELLOW
- R — CIRCULAR RED
- Ø — TRAFFIC PHASE
- AO — ALL OTHERS
- FR — FLASHING RED
- FY — FLASHING YELLOW

TRAFFIC SIGNAL CONTROL OPERATION

BUSINESS ROUTE 25 (DOUGLASS STREET)

INTERSECTION OF
BROADWATER STREET
WITH

D-38B

34-43

DATE	REVISIONS	NO.	BY	CHK.	APP.

SURVEYED BY:
DESIGNED BY: RSI
DRAWN BY: KJH
CHECKED BY: RSI
SCALE: NONE
GRAPHIC SCALE:

DATE: 3/91
DATE: 3/91
DATE: 3/91

SHSC

S. H. SMITH & CO., INC.
CONSULTING ENGINEERS—REGISTERED LAND SURVEYORS
GEOTECHNICAL EXPLORATION—MATERIALS TESTING
POPLAR BLUFF, MISSOURI CAPE GIRARDEAU, MISSOURI

CONTROL OPERATION SHEET
BUSINESS ROUTE 25 AT BROADWATER STREET
MALDEN, MISSOURI

JOB NO. 190008.00	
FIELD BOOK	
SHEET	10 OF 12
DWG. NO.	23500

STATE	PROJECT NO.
MO 57[illegible]-MG-4101(001)	

Job No. J0U0395

FINAL PLANS

M04-9L DETOUR

M04-9R DETOUR

BROADWATER WEST (48" X 18")

NORMAN DRIVE

END CONSTRUCTION 0020-2

TYPE B WARNING LIGHT

W020-1 ROAD CONSTRUCTION AHEAD W013-1P

20 MPH

500'

W020-2 DETOUR AHEAD 1000' W025-1P

W001-4LD W013-1P

M06-3D

150'

TYPE B WARNING LIGHT

W01-8 (2 REQ'D)

TYPE III BARRICADE W/TYPE B WARNING LIGHTS & SIGNS AS SHOWN

TYPE III BARRICADE W/TYPE B WARNING LIGHTS AND SIGNS AS SHOWN.

R11-4 ROAD CLOSED TO THRU TRAFFIC

M4-3 BUSINESS M1-1 25 NORTH M3-1

MONTGOMERY

0020-2 END CONSTRUCTION

200'

500'

W020-3 ROAD CLOSED AHEAD 500' W025-1P

M4-3 BUSINESS M1-1 25 SOUTH M3-3

W020-1 ROAD CONSTRUCTION AHEAD

W020-2 DETOUR AHEAD 500' W025-1P

STOKELAN

TYPE III BARRICADE W/TYPE B WARNING LIGHTS AND SIGNS AS SHOWN.

R11-2 ROAD CLOSED

BURLINGTON NORTHERN RAILROAD

SHANNS

WELCH

MASTERS

MADISON

800'

BROADWATER RD

NORTH MADISON ST.

BUSINESS RTE. 25

MAINTAIN 2-10' TRAFFIC LANES THROUGH PROJECT. USE EXISTING SHOULDER AS NECESSARY. REMOVE EXISTING ENTRANCE CURBS AS NECESSARY BEFORE DIVERTING TRAFFIC TO SHOULDER.

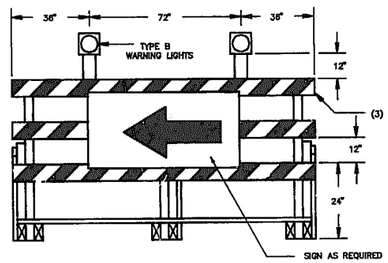
NOTE:
THE SPEED LIMIT THROUGH THE PROJECT AREA SHALL BE 20 M.P.H.

ANY EXISTING SIGNS WHICH CONFLICT WITH THE TRAFFIC CONTROL PLAN SHALL BE COVERED OR REMOVED AS APPROVED BY THE ENGINEER.

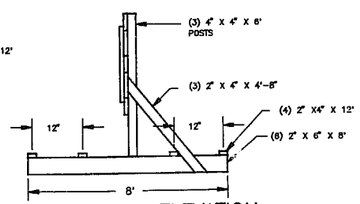
BURKHART ST.

LEGEND

- M MOVABLE BARRICADE (TYPE III)
- ■ CHANNELIZER DRUM
- K CONSTRUCTION SIGN (PORTABLE)
- ⊠ CONSTRUCTION SIGN (PORTABLE)(BACK TO BACK)
- CONSTRUCTION SIGN (NON-PORTABLE MOUNTING)
- EXISTING SIGN
- CONE
- FLAGMAN



FRONT ELEVATION



END ELEVATION

CONSTRUCTION DETAILS TYPE III BARRICADE UNIT

NO SCALE

SPECIAL SHEET

STATE OF MISSOURI — DAVID W. FRASER — NUMBER E-17739 — REGISTERED PROFESSIONAL ENGINEER

IMPROVEMENTS TO BUSINESS ROUTE 25, STA. 1+12 TO STA. 12+88
BROADWATER STREET STA. 4+00 TO STA. 7+00

DATE	REVISIONS	NO.	BY	CHK.	APP.

SURVEYED BY: DATE:
DESIGNED BY: ARM DATE: 1/92
DRAWN BY: KJH DATE: 1/92
CHECKED BY: ARM DATE: 1/92
SCALE: 1"=100'
G:\DWG\MTS\MTS5 01/24/92 15:22

SHSC

S. H. SMITH & CO., INC.
CONSULTING ENGINEERS-REGISTERED LAND SURVEYORS
GEOTECHNICAL EXPLORATION-MATERIALS TESTING
POPLAR BLUFF, MISSOURI CAPE GIRARDEAU, MISSOURI

TRAFFIC CONTROL PLAN-FIRST PHASE OF CONSTRUCTION
BUSINESS ROUTE 25 AT BROADWATER STREET
MALDEN, MISSOURI

JOB NO. 190068.00
FIELD BOOK
SHEET 5 OF 12
DWG. NO. 3359.05

386 214

STATE	PROJECT NO.
MO	STP-MG-4101(UG1)

Job No. J0U0395

FINAL PLANS

CHANNELIZERS (DRUMS) @ ~ 100' SPACING

* 1:1 FOR H=2" TO 4" (PLANT MIX BITUMINOUS PAVT)
* 3:1 FOR H> 4" (TYPE 1 OR TYPE 2 AGGREGATE

EDGE TREATMENT MATERIAL

EXISTING PAVEMENT

* SLOPE

E.R.

** IF THIS CONDITION (H>2") IS TO REMAIN OVERNIGHT USE THE ABOVE EDGE DROP-OFF TREATMENTS AS REQUIRED OR AS DIRECTED BY THE ENGINEER.

Pavement Edge Treatment
(NON-WORKING HOURS)

CHANNELIZERS @100 SPACING

EDGE PAVT TRAFFIC LANE

500' MAX. 1000' MAX. 1000' MAX. 1000' MAX.

W020-9C OPEN TRENCH

W021-5B SHOULDER WORK AHEAD

R2-1b SPEED LIMIT 20

1/2 MILE INTERVALS

TYPICAL SIGNING FOR OPEN TRENCH
(ALL SIGNS WILL BE PORTABLE)

EDGE PAVT TRAFFIC LANE

500' MAX. 1000' MAX. 1000' MAX. 1000' MAX.

W026-9 LOW SHOULDER

W021-5B SHOULDER WORK AHEAD

R2-1b SPEED LIMIT 20

1/2 MILE INTERVALS

TYPICAL SIGNING FOR LOW SHOULDER
(ALL SIGNS WILL BE PORTABLE)

TYPE B WARNING LIGHT

W020-1 ROAD CONSTRUCTION AHEAD W013-1b

20 MPH

END CONSTRUCTION G020-2

500' 500' 150'

W01-6BR

W06-3b

TYPE B WARNING LIGHT

W01-8 (2 REQ'D)

TYPE III BARRICADE W/TYPE B WARNING LIGHTS & SIGNS AS SHOWN

BURLINGTON NORTHERN RAILROAD

SHANDS MASTERS MADISON WELCH

TYPE B WARNING LIGHT

W020-3 ROAD CLOSED AHEAD 500' W020-1b

M04-9L DETOUR

M4-3 BUSINESS M1-4 25

W020-2 DETOUR AHEAD 500' W020-1b

TYPE B WARNING LIGHT

W020-1 ROAD CONSTRUCTION AHEAD

500' 500' 500'

BROADWATER RD

END CONSTRUCTION G020-2

MONTGOMERY

500' 500'

TYPE B WARNING LIGHT

W020-1 ROAD CONSTRUCTION AHEAD W013-1b

20 MPH

MAINTAIN 2-10' TRAFFIC LANES THROUGH PROJECT. USE EXISTING SHOULDER AS NECESSARY.

TYPE B WARNING LIGHT

ROAD CLOSED R11-2

TYPE III BARRICADE W/TYPE B WARNING LIGHTS AND SIGNS AS SHOWN.

TYPE B WARNING LIGHT

ROAD CLOSED TO THRU TRAFFIC R11-4

TYPE III BARRICADE W/TYPE B WARNING LIGHTS AND SIGNS AS SHOWN.

NORTH MADISON ST.

G020-2 END CONSTRUCTION

TYPE B WARNING LIGHT

W01-8 (2 REQ'D)

TYPE III BARRICADE W/TYPE B WARNING LIGHTS & SIGNS

W06-3b

TYPE B WARNING LIGHT

W01-6b

W013-1b

20 MPH

M04-9R DETOUR BROADWATER EAST (48" X 18")

W020-2 DETOUR AHEAD 500' W020-1b

TYPE B WARNING LIGHT

W020-1 ROAD CONSTRUCTION AHEAD W013-1b

20 MPH

500' 500' 150'

BUSINESS RTE 25

G020-2 END CONSTRUCTION

BURKHART ST.

FRANCIS ST.

M04-9R DETOUR

M04-9L DETOUR

IMPROVEMENTS TO BUSINESS ROUTE 25, STA. 1+12 TO STA. 12+88
BROADWATER STREET STA. 7+00 TO STA. 10+00

TYPE B WARNING LIGHTS

W020-7b FLAGMAN AHEAD

W020-1 ROAD CONSTRUCTION AHEAD

W01-8 (2 REQ'D)

CHANNELIZERS @ 100' MAX SPACING

500' 500' 500'

WORK AREA

AS SHOWN EDGE PAVT

TRAFFIC LANE

TYPICAL SIGNING FOR CONSTRUCTION WITHIN 10' TRAVELWAY

LEGEND

- ⊟ MOVABLE BARRICADE (TYPE III)
- ● "CHANNELIZER
- K CONSTRUCTION SIGN (PORTABLE)
- M CONSTRUCTION SIGN (PORTABLE)(BACK TO BACK)
- CONSTRUCTION SIGN (NON-PORTABLE MOUNTING)
- EXISTING SIGN
- o CONE
- FLAGMAN

NOTE:
TRAFFIC CONTROL DEVICES IN AND AROUND THE PROJECT AREA SHALL BE USED IN CONFORMANCE TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", LATEST EDITION, INCLUDING REV.'S & ADD.'S

NOTE:
THE SPEED LIMIT THROUGH THE PROJECT AREA SHALL BE 20 M.P.H.

ANY EXISTING SIGNS WHICH CONFLICT WITH THE TRAFFIC CONTROL PLAN SHALL BE COVERED OR REMOVED AS APPROVED BY THE ENGINEER.

SPECIAL SHEET

STATE OF MISSOURI — JOHN W. WINKELMAN — PROFESSIONAL ENGINEER

PLOT DR. -1.06,-0.33

DATE	REVISIONS	NO.	BY	CHK.	APP.

SURVEYED BY: DATE:
DESIGNED BY: AWM DATE: 1/92
DRAWN BY: KJH DATE: 1/92
CHECKED BY: AWM DATE: 1/92
SCALE: 1"=100'
G:\DWG\MTS\MTS6 01/27/92 09:21

SHSC

S. H. SMITH & CO., INC.
CONSULTING ENGINEERS—REGISTERED LAND SURVEYORS
GEOTECHNICAL EXPLORATION—MATERIALS TESTING
POPLAR BLUFF, MISSOURI CAPE GIRARDEAU, MISSOURI

TRAFFIC CONTROL PLAN—SECOND PHASE OF CONSTRUCTION
BUSINESS ROUTE 25 AT BROADWATER STREET
MALDEN, MISSOURI

JOB NO. 190005.00
FIELD BOOK
SHEET 6 OF 12
DWG. NO. 2350.06

30785

REVISED JAN. 1, 1992

STATE MO | JOB NO. J0U0395 | DIST NO. | PROJ. STPG-MG-4101(001)
COUNTY DUNKLIN

FINAL PLANS

MISSOURI HIGHWAY AND TRANSPORTATION COMMISSION

STANDARD PLANS

✓	NO.	DESCRIPTION
✓	203.00E	EXCAVATION & EMBANKMENT
	203.02C	UNDERGRADING
	203.10B	TABULATED EARTHWORK & SECTION DATA
	203.20B	SUPERELEVATION SPIRALS & WIDENING (UNDIVIDED)
	203.21B	SUPERELEVATION SPIRALS & WIDENING (DIVIDED)
	203.30A	ENTRANCES & APPROACHES (LESS THAN 400 ADT)
✓	203.31B	ENTRANCES & APPROACHES (GREATER THAN 400 ADT - NO SAFETY ZONE)
	203.32D	ENTRANCES & APPROACHES (GREATER THAN 400 ADT - SAFETY ZONE)
	203.35A	MAILBOX TURNOUTS
	203.40E	TYPICAL DETAILS-RAMPS FOR INTERCHANGES (OTHER THAN 6:1 FORESLOPE)
	203.41E	TYPICAL DETAILS-RAMPS FOR INTERCHANGES (6:1 FORESLOPE)
	203.50J	TYPICAL CROSS-OVERS (DIVIDED HIGHWAYS)
	203.61	DRIVEWAY TYPE I
	203.62	DRIVEWAY TYPE II
	203.63	DRIVEWAY TYPE III
	203.64	DRIVEWAY TYPE IV
	203.65	DRIVEWAY TYPE V
	204.00D	EMBANKMENT CONTROL MEASURING DEVICES
	502.00M	CONCRETE PAVEMENT & BASE APPURTENANCES
	502.10E	DOWEL SUPPORTING UNITS
	503.00J	CONCRETE APPROACH SLABS TO BRIDGES (ALSO INCLUDE 502.00)
	602.00A	RIGHT-OF-WAY & DRAIN MARKERS
	604.05B	PIPE CULVERT HEADWALLS - TYPE S
	604.10B	HEADWALL-WITH ENERGY DISSIPATOR - 18"
	604.11B	HEADWALL-WITH ENERGY DISSIPATOR - 24"
	604.12B	HEADWALL-WITH ENERGY DISSIPATOR - 30"
	604.13B	HEADWALL-WITH ENERGY DISSIPATOR - 36"
	604.14B	HEADWALL-WITH ENERGY DISSIPATOR - 42"
	604.15B	HEADWALL-WITH ENERGY DISSIPATOR - 48"
	604.20B	DROP INLET - TYPE B
	604.21B	DROP INLET - TYPE C
	604.22B	DROP INLET - TYPE D
	604.23B	DROP INLET - TYPE E
	604.24B	DROP INLET - TYPE EE
	604.25C	DROP INLET - TYPE F
	604.26D	DROP INLET - TYPE G
	604.27D	DROP INLET - TYPE S (3 SHEETS)
	604.28E	DROP INLET - TYPE T (ALSO INCLUDE 614.30)
	604.29C	DROP INLET - TYPE X
	604.30F	CONCRETE MANHOLES (ALSO INCLUDE 614.30)
	604.40E	PIPE COLLARS
	605.10A	CLASS A UNDERDRAINS
	606.00X	GUARD RAIL (6 SHEETS)
	606.22K	BRIDGE ANCHOR SECTION (SAFETY BARRIER CURB ON BRIDGE) (ALSO INCLUDE 606.00)
	606.23C	BRIDGE ANCHOR SECTION (THRIE BEAM RAIL ON BRIDGE)(ALSO INCLUDE 606.00)
	606.30E	TERMINAL SECTION (ALSO INCLUDE 606.00)
	606.40A	GUARD CABLE
	607.10R	CHAIN LINK FENCE
	607.11B	CHAIN LINK FENCE FOR RETAINING WALLS
	607.20F	WOVEN WIRE FENCE (ALSO INCLUDE 607.10)

✓	NO.	DESCRIPTION
	608.00C	PAVED APPROACHES
	608.10G	CONCRETE SIDEWALK & WHEELCHAIR RAMPS
	608.20C	CONCRETE STEPS
✓	609.00G	CONCRETE CURB - CURB & GUTTER - GUTTER
	609.15B	PAVED DITCHES
	609.40D	DRAIN BASIN, SHOULDER PAVING & FILL SLOPE AT BRIDGE ENDS
	609.60B	DITCH LINER
	609.70C	ROCK LINING FOR CULVERT OUTLETS
	610.20E	BRICK MANHOLES (ALSO INCLUDE 614.30)
	611.60L	CONCRETE SLOPE PROTECTION
	612.10K	BARRICADES AND FLASHER SIGNS
	613.00B	PAVEMENT REPAIR
	614.10R	CURB INLETS, GRATES & BEARING PLATES
	614.30D	MANHOLE FRAMES & COVERS
	615.00A	OFFICE FOR ENGINEER
✓	616.10M	TRAFFIC CONTROL DEVICES (3 SHEETS)(ALSO INCLUDE 903.01)
	617.00W	CONCRETE TRAFFIC BARRIER (3 SHEETS)
	702.01F	16" CONCRETE PILES (APPROVED TYPES)(2 SHEETS)
	702.02B	CAST-IN-PLACE CONCRETE PILES (APPROVED TYPES)
	703.21E	CONCRETE BOX CULVERTS, H20 LOADING (3 SHEETS)(FLARED WINGS)(INCL 706.35)
	703.24E	CONCRETE BOX CULVERTS, SKEW DATA (703.30)(INCL 706.35)
	703.25E	CONCRETE BOX CULVERTS, SKEW DATA (703.21)(3 SHTS) (FLRD WINGS)(INCL 706.35)
	703.30F	CONCRETE BOX CULVERTS, 4' SPANS & LESS-ALL LOADING (INCL 706.35)
	703.35B	CONCRETE BOX CULVERTS, CUTTING DETAILS (STRAIGHT WINGS) (INCL 706.35)
	703.36A	CONCRETE BOX CULVERTS, CUTTING DETAILS (FLARED WINGS) (INCL 706.35)
	703.50H	CONCRETE DOUBLE BOX STRUCTURE-SQUARE (INCL 706.35)
	703.51G	CONCRETE DOUBLE BOX STRUCTURE-SKEWED (INCL 706.35)
	703.52D	CONCRETE DOUBLE BOX STRUCTURE-CUT SECTIONS (INCL 706.35)
	703.54E	DOUBLE BOX STRUCTURE REINFORCEMENT-H20 OR HS20 LOADING (8 SHEETS)
	703.55E	CONCRETE DOUBLE BOX STRUCTURE (FLARED WINGS) SQUARE (INCL 706.35)
	703.56E	CONCRETE DOUBLE BOX STRUCTURE (FLARED WINGS) SKEWED (INCL 706.35)
	703.60C	CONCRETE BOX STRUCTURE-PIPE INLET
	703.70D	CONCRETE TRIPLE BOX STRUCTURE-SQUARE (2 SHEETS) (INCL 706.35)
	703.71D	CONCRETE TRIPLE BOX STRUCTURE-SKEWED (2 SHEETS) (INCL 706.35)
	703.72D	CONCRETE TRIPLE BOX STRUCTURE-(FLARED WINGS)(SQUARE) (2 SHEETS)(INCL 706.35)
	703.73D	CONCRETE TRIPLE BOX STRUCTURE-(FLARED WINGS)(SKEWED) (2 SHEETS)(INCL 706.35)
	703.74D	CONCRETE TRIPLE BOX STRUCTURE-CUT SECTIONS (INCL 706.35)
	703.76B	CONCRETE TRIPLE BOX STRUCTURE REINFORCEMENT-H20 OR HS20 LOADING (5 SHEETS)
	706.30C	REINFORCING BAR SUPPORTS
	706.35E	BAR SUPPORTS FOR CONCRETE REINFORCEMENT
	712.40E	STEEL DAMS FOR BRIDGES (6" CHANNEL)
	725.31C	METAL CURTAIN WALL AND METAL INLETS
✓	726.30C	CULVERT INSTALLATION METHODS
	731.00S	PRECAST MANHOLES (ALSO INCL 614.30)
	731.10K	PRECAST DROP INLETS (4 SHTS)(ALSO INCL 614.30 & 614.10)

✓	NO.	DESCRIPTION
	732.00L	FLARED END SECTION (2 SHEETS)
	806.02A	STAPLE PLACEMENT FOR PLASTIC NETTING
		HIGHWAY LIGHTING
	901.00P	POLES & APPURTENANCES-30' (3 SHEETS)
	901.01U	POLES & APPURTENANCES-45' (3 SHEETS)
	901.05A	CONTROL PANEL CABINET DETAILS (2 SHEETS)(SEE [illegible])
	901.12C	POLE MOUNT CONT STA-SECONDARY SERV-480 V MULTI CIR (METERED)
	901.15E	POLE MOUNT CONT STA-SEC SERV-120,240, & 4[illegible]
	901.16D	POLE MOUNT CONT STA-SEC SERV-480 V MULTI CIR [illegible]
	901.18D	POLE MOUNT CONT STA-SEC SERV-120/240 V MULTI CIR
	901.19D	POLE MOUNT CONT STA-SEC SERV-240 V MULTI CIR (METERED)
	901.20D	POLE MOUNT CONT STA-SEC SERV-120/240 V MULTI CIR (SIG METERED)
	901.22E	POLE MOUNT CONT STA-SEC SERV-120/240 & 480 V MULTI CIR (BOTH METERED)
	901.23E	POLE MOUNT CONT STA-SEC SERV-240 V MULTI CIR (METERED)
	901.24D	POLE MOUNT CONT STA-SEC SERV-240 V MULTI CIR (LIGHTS & SIGNALS-BOTH METERED)
	901.25D	BASE MOUNT CONT STA-SEC SERV-120/240 V MULTI CIR
		NOTE: ALSO INCLUDE 901.00 WITH 901.12 THROUGH 901.25 EXCEPT 901.18
		TRAFFIC SIGNALS
✓	902.00F	SIGNAL HEADS, LENSES AND MOUNTING
✓	902.10J	PULL BOXES, CONTROLLERS, COND LOCATION
✓	902.15D	POWER SUPPLY ASSEMBLY
	902.21B	TELEPHONE INTERCONNECT
✓	902.30G	CONCRETE BASES
✓	902.40J	TUBULAR STEEL POST
✓	902.50F	DETECTORS
	902.60F	SPAN WIRE DETAILS-STEEL POST
	902.70D	SPAN WIRE DETAILS-WOOD POLE
✓	902.80A	TRAFFIC SIGNAL SYMBOLS
		HIGHWAY SIGNING
✓	903.01C	ALPHABETS (2 SHEETS)
	903.02Y	HIGHWAY SIGNING (7 SHEETS)
	903.03AP	SIGN MOUNTING DETAILS (5 SHEETS)
	903.04D	WEIGH STATION SIGNING
	903.05C	TUBULAR SPAN SUPPORT-ONE TUBE, TYPE S
	903.06C	TUBULAR SPAN SUPPORT-TWO TUBE, TYPE S
	903.07C	TUBULAR CANTILEVER SUPPORTS, TYPE C
	903.08C	TUBULAR BUTTERFLY SUPPORTS, TYPE B
	903.09C	LIGHTING SUPPORT BRACKET
	903.10T	SIGN TRUSSES-OVERHEAD ALUMINUM (8 SHEETS)(INCL 903.03)
	903.12N	SIGN TRUSSES-BUTTERFLY & CANTILEVER-STEEL (7 SHEETS) (INCL 903.03)
	903.60S	SIGN TRUSSES-OVERHEAD STEEL (7 SHEETS)(INCL 903.03)

NOTES:
PLANS FOR THIS PROJECT WERE DEVELOPED USING DRAWINGS FROM THIS INDEX

342-216

DESIGN DESIGNATION

A.D.T. 1970 = 1830
A.D.T. 1993 = 3290
D.H.V. = 295
D = 60%
T = 5% OF D.H.V.
V = 70 M.P.H.

MISSOURI STATE HIGHWAY COMMISSION

PLANS FOR PROPOSED

STATE HIGHWAY

FEDERAL AID PROJECT

DUNKLIN—NEW MADRID COUNTIES

ROUTE 25

PROJECT TQF-TQFG-25-1(12)

JOB NO. 10-P-25-40

FINAL PLANS

LENGTH OF PROJECT

END OF PROJECT	STA.	155+76.5
BEGINNING OF PROJECT	STA.	138+75.0
APPARENT LENGTH		1701.5 FEET
EQUATIONS AND EXCEPTIONS		NONE
TOTAL CORRECTIONS		0 FEET
NET LENGTH OF PROJECT		1701.5 FEET
STATE LENGTH		0.322 MILES
FEDERAL LENGTH		0.322 MILES

INDEX OF SHEETS

DESCRIPTION	SHEET NO.
TITLE SHEET	1
TYPICAL SECTIONS (4 SHEETS)	2
SUMMARY (SHEET)	2-A
SUMMARY (4 SHEETS)	2-B
PLAN-PROFILE	3-15
REFERENCE POINTS	16
SPECIAL SHEETS	18-29
LIGHTING	
SIGNALS	
SIGNING	
CULVERT SECTIONS	30-34
BRIDGE DRAWINGS	35-61
STANDARD PLANS INDEX	62
CROSS SECTIONS	1-67
COMPUTER DATA	

LIMITED ACCESS HIGHWAY

THIS SHALL BE A LIMITED ACCESS HIGHWAY BETWEEN STA 138+75.0 AND STA 362+00 EXCEPT AT LOCATIONS AND AS OTHERWISE SPECIFICALLY SHOWN ON THESE PLANS, NO ABUTTER'S RIGHTS IN, OR OF DIRECT ACCESS TO, FROM, OR ACROSS THE HIGHWAY OR ITS RIGHT-OF-WAY SHALL ATTACH OR BELONG TO ANY PROPERTY ABUTTING ON SAID SECTION OF HIGHWAY, OR TO ANY PERSON MERELY BECAUSE OF OWNERSHIP OF SUCH ABUTTING PROPERTY. THERE SHALL BE THE USUAL RIGHT OF ACCESS OVER ANY LOCATION SHOWN ON THESE PLANS EITHER AS (1) AN ENTRANCE OR (2) A PRIVATE UNDERPASS. WHEREVER AN ADJACENT OUTER ROADWAY OR SERVICE ROAD IS SHOWN, THERE SHALL BE THE USUAL RIGHT OF DIRECT ACCESS BETWEEN THE ABUTTING PROPERTY AND SUCH OUTER ROADWAY OR SERVICE ROAD (EXCEPT WHERE ACCESS IS SPECIFICALLY PROHIBITED BY THE SPECIAL SYMBOL DENOTING NO RIGHT OF ACCESS) AND ALONG IT TO AND FROM THE NEAREST LANE OF THE THRUWAY OR A PUBLIC HIGHWAY. OUTER ROADWAYS AND SERVICE ROADS, AS THE CASE MAY BE, ARE SO DESIGNATED ON THE PLANS.

- BEGINNING AND ENDING OF LIMITED ACCESS.
- LIMITED ACCESS
- NO RIGHT OF ACCESS OR CROSSING OF LINES BEARING THIS SYMBOL WILL BE PERMITTED UNDER ANY CIRCUMSTANCES.

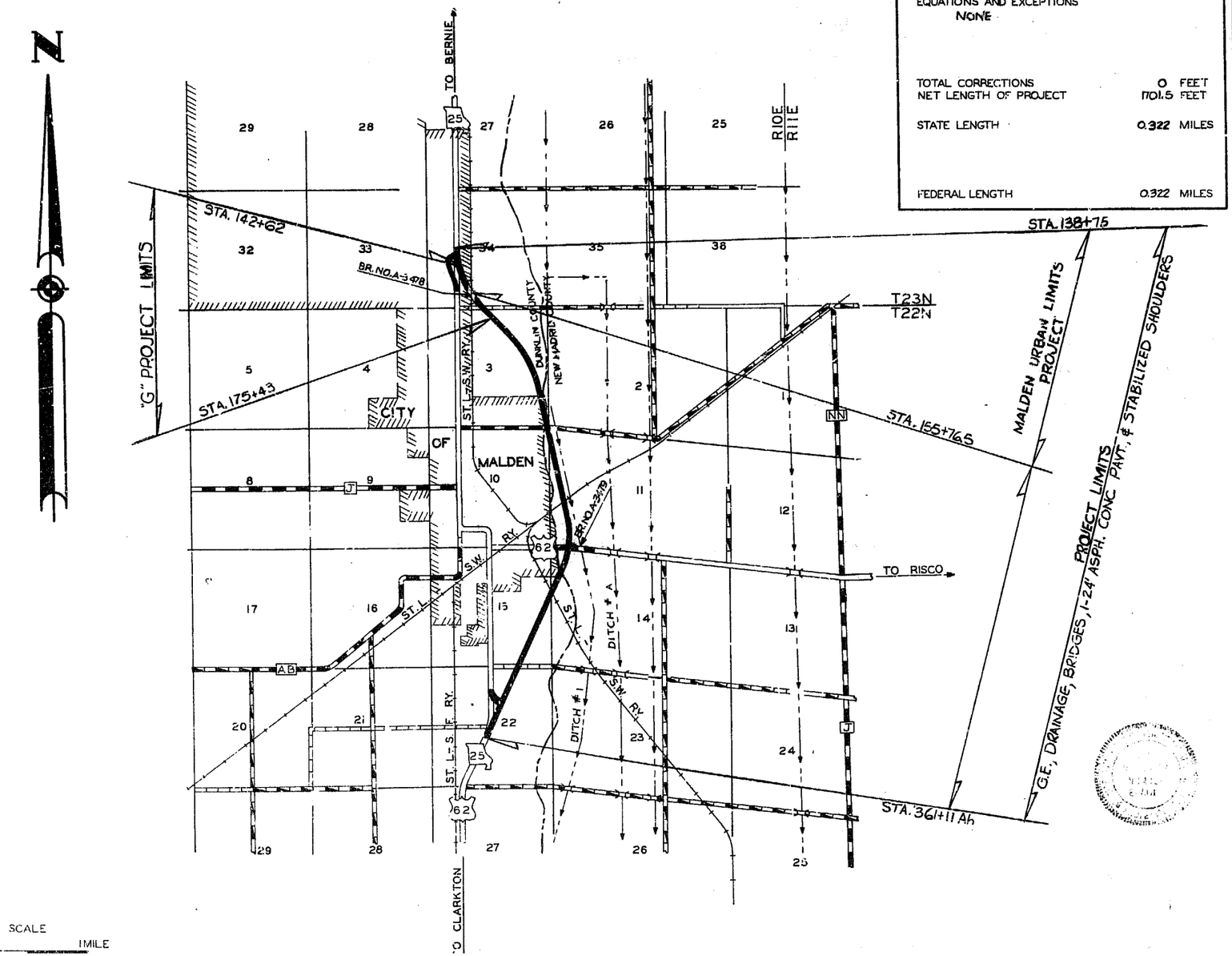
CONVENTIONAL SIGNS

(USED IN PLANS)

- BUILDINGS AND STRUCTURES
- GUARD RAIL
- CONCRETE RIGHT-OF-WAY MARKER
- STEEL RIGHT-OF-WAY MARKER
- FENCE
  - CHAIN LINK
  - WOVEN WIRE
  - GATE
- UTILITIES
  - TELEPHONE
  - POWER
  - GAS
  - WATER

NOTE DASHED OR OPEN SYMBOL INDICATES EXISTING FEATURE

TITLE SHEET LEGEND



GRAPHIC SCALE

½ MILE 0 1 MILE

LENGTH OF PROJECT

END OF PROJECT	STA.	361+11
BEGINNING OF PROJECT	STA.	155+76.5
APPARENT LENGTH		2058.4.5 FEET
EQUATIONS AND EXCEPTIONS		369+08.48 Bk = 359+26.44 Ah. (+979.04')
TOTAL CORRECTIONS		979.04 FEET
NET LENGTH OF PROJECT		21513.54 FEET
STATE LENGTH		4.075 MILES
EXCEPTION TO STATE LENGTH:		259+26.71 TO 259+35.76 (-9.05')
		304+11.81 TO 304+21.21 (-9.40')
FEDERAL LENGTH = 21495.09 FEET		
FEDERAL LENGTH		4.071 MILES
+ Urban Limits		0.322
TOTAL		4.393 MILES

MISSOURI STATE HIGHWAY COMMISSION

SUBMITTED

CHIEF ENGINEER DATE

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION

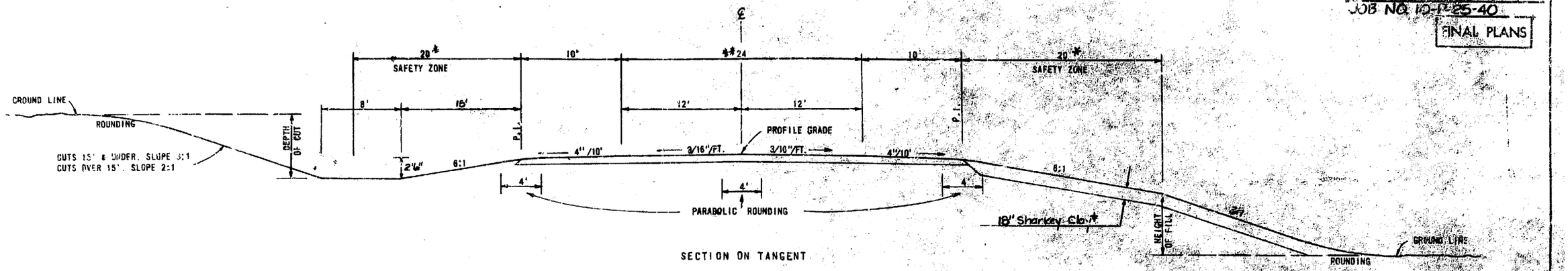
APPROVED

DIVISION ENGINEER DATE

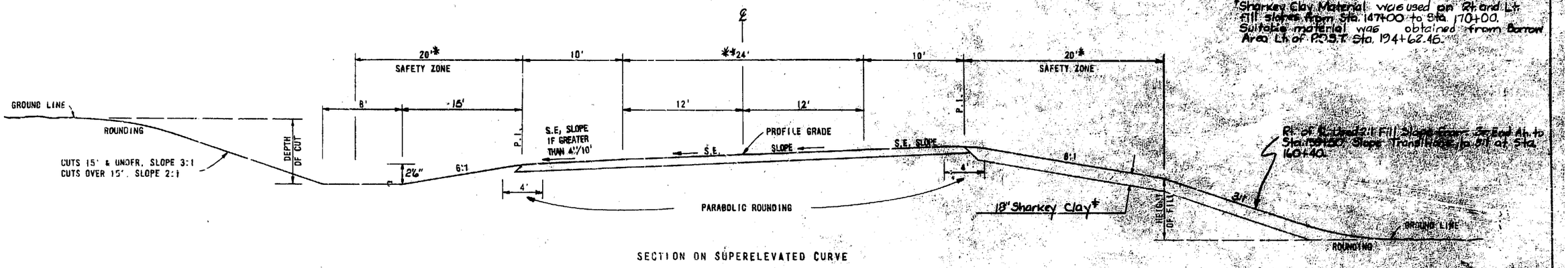
STEP ROAD DIST. NO.	STATE	FEDERAL PROJECT NO. & SEC.	SHEET NO.
5	MO.	FAP-70(F)S-25-1(12)	2
TOTAL SHEETS		ROUTE NO.	
10		25	

JOB NO. 10-F-25-40

FINAL PLANS



SECTION ON TANGENT



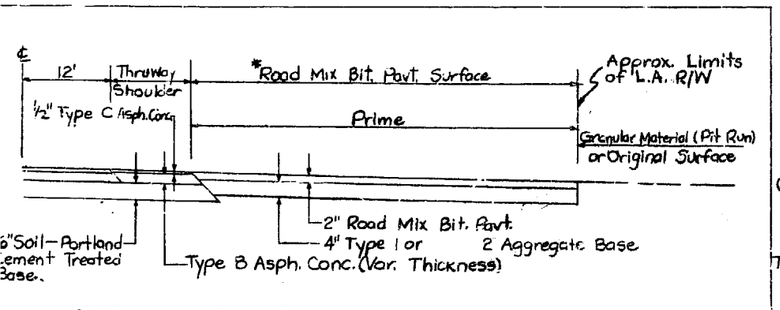
SECTION ON SUPERELEVATED CURVE

†Sharkey Clay Material was used on Rt. and Lt. fill slopes from Sta. 147+00 to Sta. 170+00. Suitable material was obtained from Borrow Area Lt. of P.O.T. Sta. 194+62.46.

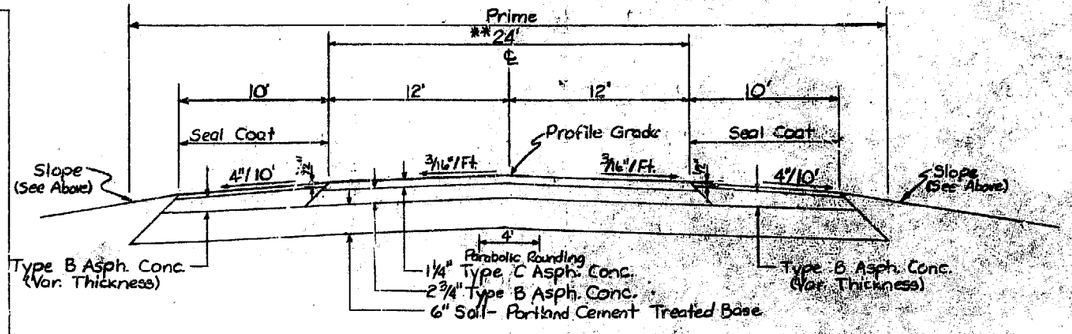
Rt. of ℄ Under 3:1 Fill Slopes Start at Lt. to Sta. 139+50. Slope Transition to 3:1 at Sta. 140+40.

*Omit Safety Zone Back of Station 145+00. Transition from Safety Zone to 3:1 Inslope and Fill Slopes between Sta. 141+60 and Sta. 142+00. Use 3:1 Inslopes and Fill Slopes back of Sta. 141+50.

**Thruway Pavement Varies - 24'-42' Sta. 279+302 to Sta. 285+248 - 24'-36' Sta. 348+85 to Sta. 361+11.



SURFACING REQUIREMENTS FOR SIDE ROAD APPROACHES
(Std. 203.32)



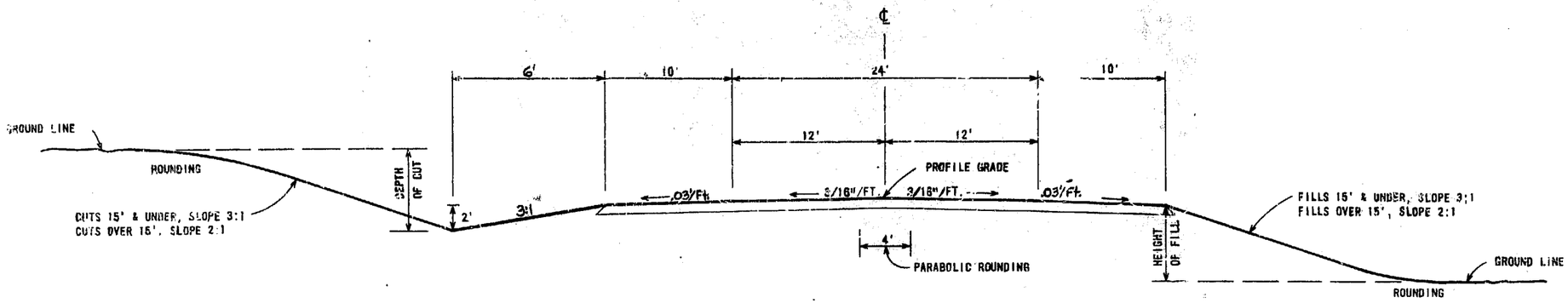
SURFACING DETAIL

TYPICAL SECTION
ROUTE 25 STA. 138+75 TO STA. 361+11

5	STATE	FEDERAL PROJECT No. & SEC.	SHEET NO.
	MO.	TQF-TQ-25-1(12)	2
CONT. NO.	COUNTY		TOTAL SHEETS
10	DUNKLIN-NEW MADRID		25

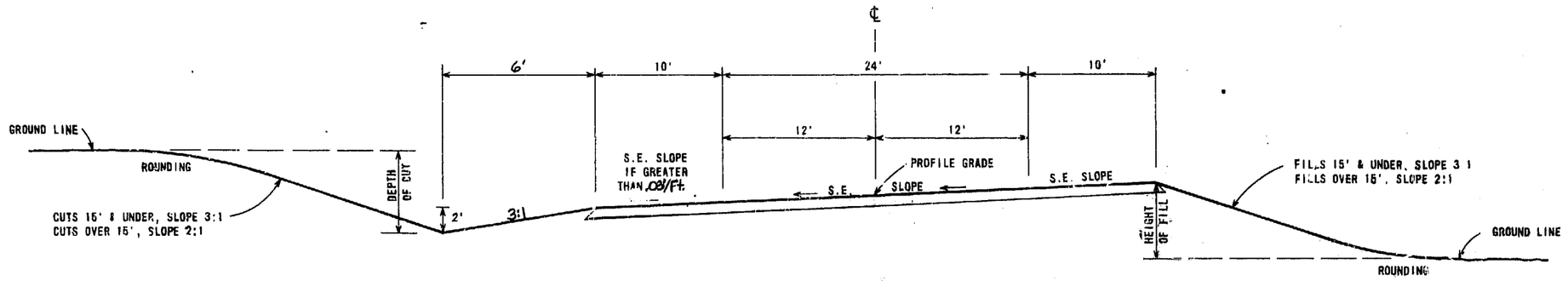
JOB NO. 10-P-25-40

FINAL PLANS

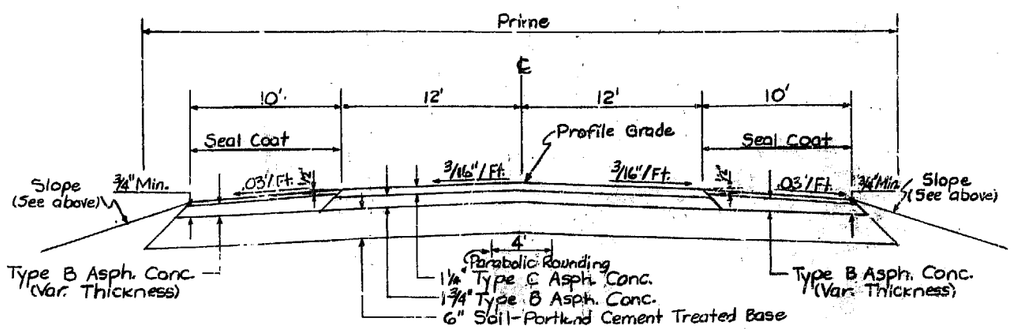


SECTION ON TANGENT

[redacted]



SECTION ON SUPERELEVATED CURVE



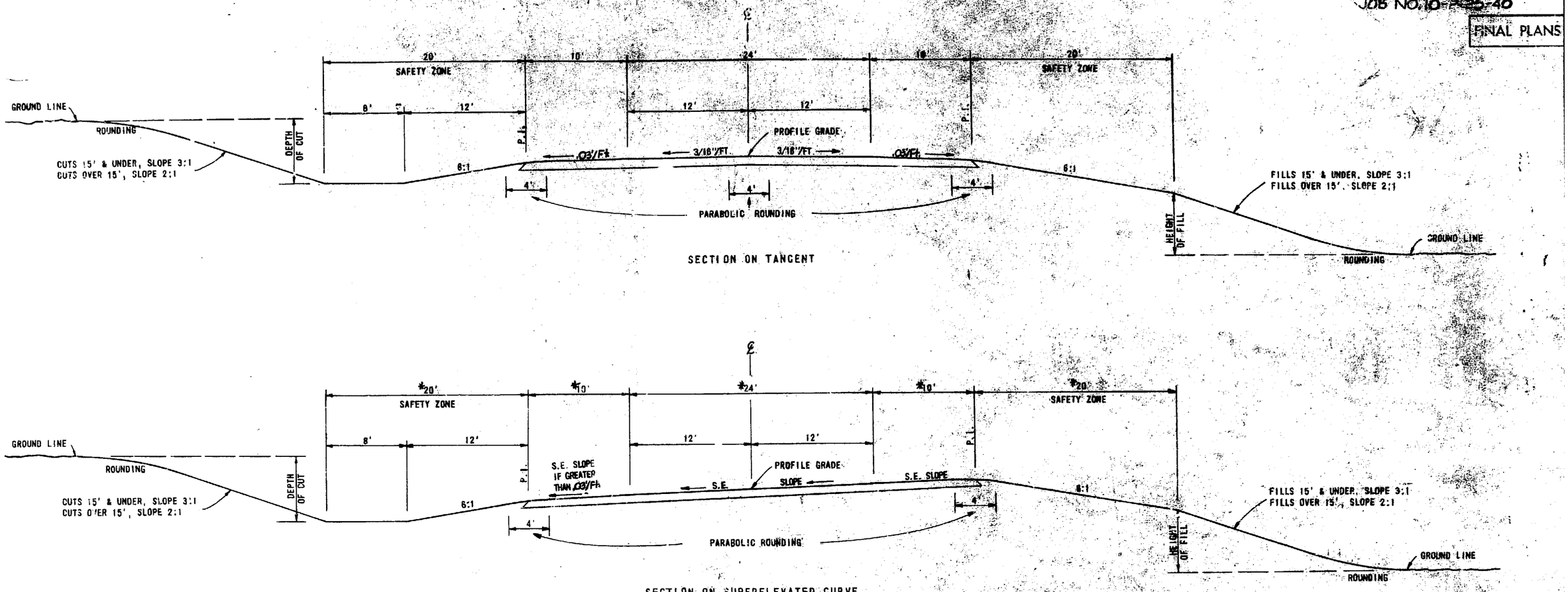
SURFACING DETAIL

TYPICAL SECTION
ROUTE 25 CONNECTION
(STA. 139+30)

5	MO.	TQF-7256-25-(12)		2
DIST. NO.		COUNTY	ROUTE	SEC.
10		DONA ANA NEW MEXICO	25	

JOB NO. 10-[illegible]5-40

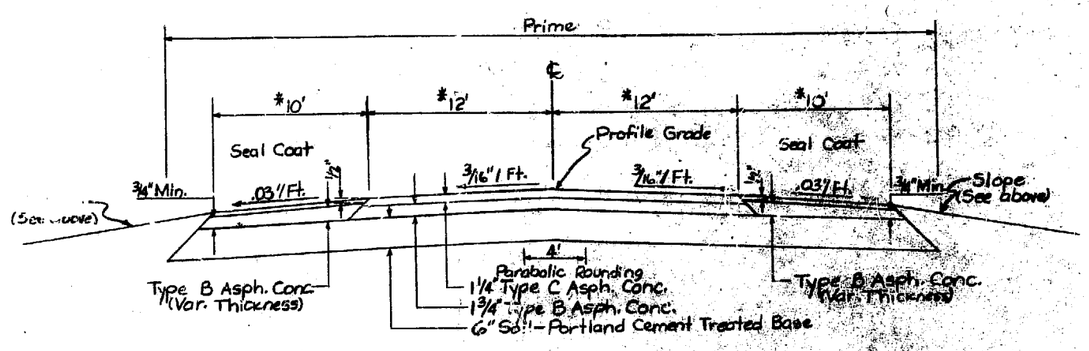
FINAL PLANS



SECTION ON TANGENT

SECTION ON SUPERELEVATED CURVE

*See other dwgs. for additional Surfacing details of Route 62 Back of Sta. 30+38.9 and ahead of Sta. 39+00.



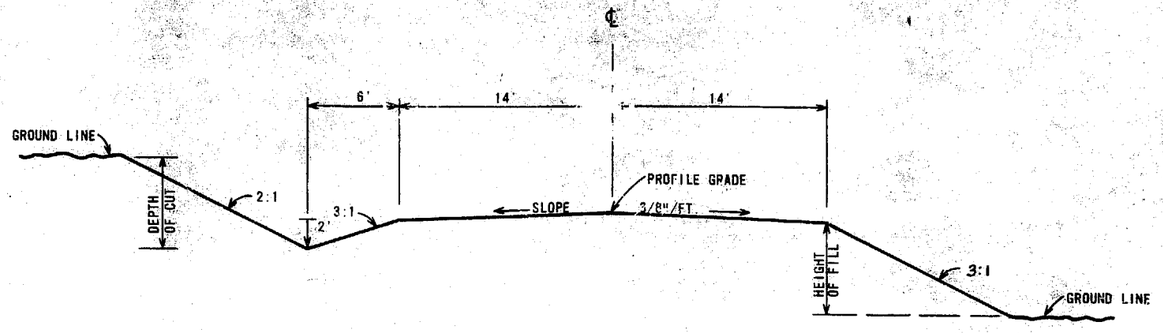
SURFACING DETAIL

TYPICAL SECTIONS
ROUTE 62 STA. 30+38.9 TO STA 40+00
ROUTE 25 CONNECTION (STA. 359+90)

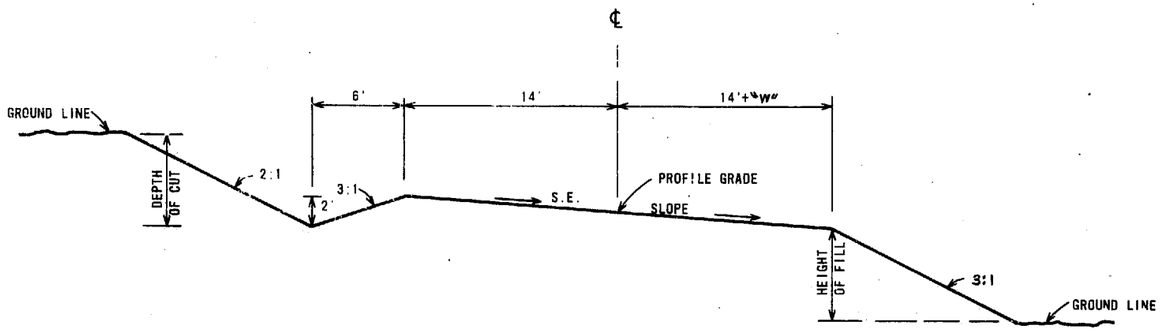
5	STATE	FEDERAL PROJECT No. & SEC.	2
10	NEW MEXICO	DONA ANA	25

JOB NO. 10-F-25-40

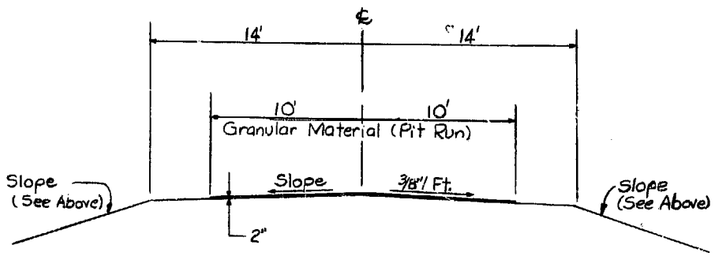
FINAL PLANS



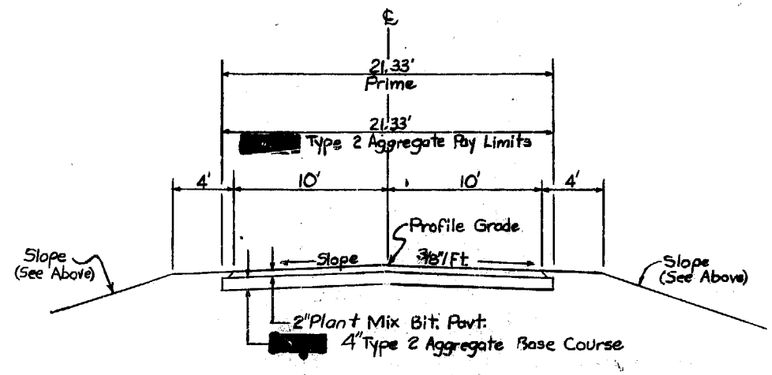
SECTION ON TANGENT



SECTION ON SUPERELEVATED CURVE



SURFACING DETAIL FOR AGGREGATE SURFACE
Outside Limits of Limited Access R/W



SURFACING DETAIL FOR PLANTMIX · BIT. SURFACE
Within Limits of Limited Access R/W

TYPICAL SECTION
OUTER ROADS,
RELOCATED LOCAL ROADS
AND
SIDE ROADS
ST'D. 20332

MISSOURI STATE HIGHWAY COMMISSION
SUMMARY OF QUANTITIES

SHEET 1 OF 1

5	MO. TQF-TQFG-25-1(12)	2A
DIST. NO.	COUNTY	ROUTE
10	DUNKLIN- NEW MADRID	25

ITEM	DESCRIPTION	UNIT	QUANTITY	
2-10.10	REMOVAL OF BRIDGES	EACH	1	
2-20.10	REMOVAL OF IMPROVEMENTS	LUMP SUM	1	
3-10.00	CLASS A EXCAVATION	CU YD	589,748	G-407745
3-40.00	COMPACTING EMBANKMENT	CU YD	385,173	G-283733
3-70.00	COMPACTING IN CUT	CU YD	11,050	
3-10.00	OVERHAUL (STATION)	STA YD	64,228	G-22743
3-20.00	OVERHAUL .1/4 MILE)	QT MI YD	744,430	G-541452
3-30.00	CLASS 3 EXCAVATION	CU YD	2,105	G-194
7-10.00	LINEAR GRADING CLASS 1	STATION	18.5	
7-20.00	LINEAR GRADING CLASS 2	STATION	8.9	
8-10.00	INTERCEPTION DITCH	100 FT	3	
9-10.00	MOBILIZATION	LUMP SUM	1	
1-30.00	ASPHALT CEMENT (BASE WIDENING) (2)	TON	0	
1-40.00	MINERAL AGGREGATE (BASE WIDENING) (3)	TON	0	
4-00.43	( ) TYPE 2 AGGREGATE FOR BASE (6 IN. THICK)	SQ YD	4,005	G-850
4-00.43	TYPE 2 AGGREGATE FOR BASE (6 IN. THICK)	SQ YD	8,742	
6-10.10	CEMENT	BARREL	16,601	G-1831
6-10.20	SOIL	TON	39,394	G-4346
6-99.99	GRANULAR MATERIAL (PIT RUN)	C. Y.	425	G-31
6-99.99	TEMPORARY SURFACING	CU YD	492	G-310
9-40.02	ASPHALT CEMENT (ASPH. CONC.) 85-100 PENETRATION	TON	0	
9-70.00	MINERAL AGGREGATE (ASPHALTIC CONCRETE) (TYPE C MIX)	TON	18,245	G-2156
9-80.00	MINERAL AGGREGATE (ASPHALTIC CONCRETE) (TYPE C MIX)	TON	5,403	G-543
9-10.64	LIQUID ASPHALT (ROAD MIX) MC 800	GALLON	0	
9-20.42	AGGREGATE GRADATION G	TON	0	
9-30.00	PROCESSING (ROAD MIX)	MILE	.93	G-06
9-10.10	PRIME-LIQUID ASPHALT RC 70 OR MC 30	GALLON	39,840	G-4130
9-20.00	SANDING PRIMER	CU YD	0	
9-10.05	BITUMINOUS MATERIAL (SEAL COAT)	GALLON	15,620	G-1780
9-20.22	COVER AGGREGATE GRADE 2	TON	703	G-36
1-10.00	FIELD LABORATORIES	LUMP SUM	1	
1-99.06	2 IN. COPPER WATER TUBE TYPE K	L.F.	157	
1-99.01	6 IN WATER PIPE	L.F	822	
1-99.02	8 IN WATER PIPE	L.F.	92	
1-99.05	FITTINGS	POUND	980	
1-97.06	RELOCATING GATE VALVES	EACH	1	

ITEM	DESCRIPTION	UNIT	QUANTITY	
603-99.11	18 IN ENCASEMENT CONDUIT (CLASS III REINF. CONC. PIPE)	L.F.	34	
603-99.12	24in ENCASEMENT CONDUIT (CLASS III REINF. CONC. PIPE)	L.F	150	
604-30.10	ADJUSTING HOUSE SEWER CONNECTIONS	LIN FT	165	
605-10.15	8 IN. CLASS A UNPERFORATED UNDERDRAIN PIPE	LIN FT	150	G-150
606-10.10	GUARD RAIL TYPE A	LIN FT	350	G-300
606-20.00	BRIDGE ANCHOR SECTION (BRUSH CURB)	EACH	4	G-4
606-30.00	TERMINAL SECTION	EACH	4	G-4
608-10.00	CONCRETE MEDIAN	SQ YD	583.4	
608-50.08	PAVED APPROACH, 6 IN.	SQ YD	82.4	
609-10.10	CONCRETE CURB (6 IN. HEIGHT AND UNDER) TYPE S	LIN FT	532	G-84
609-10.41	CONCRETE GUTTER TYPE A	LIN FT	129	
609-10.51	CURB AND GUTTER TYPE A	LIN FT	129	
609-20.32	CONCRETE CURB LOW PROFILE TYPE F	LIN FT	1,520	
609-40.10	DRAIN BASIN	EACH	1	G-1
611-60.10	CONCRETE SLOPE PROTECTION	SQ YD	2,122.5	G-2122.5
612-10.30	MOVABLE BARRICADES	EACH	17	
612-10.50	FLASHER SIGN	EACH	8	
612-20.15	STANDARD CONSTRUCTION SIGNS	LUMP SUM	1	
614-10.10	GRATES AND BEARING PLATES	POUND	6,900	G-300
703-20.01	CLASS B CONCRETE (CULVERTS)	CU YD	229.1	
703-20.02	CLASS B CONCRETE (MISC)	CU YD	66.6	G-3.0
706-10.00	REINFORCING STEEL	POUND	2,470	G-110
706-10.30	REINFORCING STEEL (CULVERT)	POUND	25,040	
725-02.15	15 IN. PIPE CULVERT GROUP II	LIN FT	746	G-140
725-02.18	18 IN. PIPE CULVERT GROUP II	LIN FT	344	G-62
725-02.24	24 IN. PIPE CULVERT GROUP II	LIN FT	150	
725-02.30	30 IN. PIPE CULVERT GROUP II	LIN FT	144	
725-02.48	48 IN. PIPE CULVERT GROUP II	LIN FT	124	
725-10.24	24 IN. CORRUGATED GALVANIZED METAL PIPE	LIN FT	46	
726-13.15	15 IN. CLASS III REINFORCED CONCRETE PIPE CULVERT	LIN FT	55	
726-13.18	18 IN. CLASS III REINFORCED CONCRETE PIPE CULVERT	LIN FT	245	
726-13.24	24 IN. CLASS III REINFORCED CONCRETE PIPE CULVERT	LIN FT	909	G-75
726-13.30	30 IN. CLASS III REINFORCED CONCRETE PIPE CULVERT	LIN FT	1291	G-469
728-10.00	RELAID PIPE	LIN FT	36	
732-00.15	15 IN. FLARED END SECTION	EACH	2	
732-00.18	18 IN. FLARED END SECTION	EACH	3	

ITEM	DESCRIPTION	UNIT	QUANTITY
802-40.00	TYPE 4 MULCH	ACRE	119.7
803-10.00	SODDING	SQ YD	40,761
805-10.00	SEEDING	ACRE	120.8
901-32.00	CONDUIT, 2 IN. RIGID STEEL, IN TRENCH	LIN FT	360
901-33.00	CONDUIT, 3 IN. RIGID STEEL, IN TRENCH	LIN FT	44
	...		
	BRIDGE DWG. NO. A-3478 AT STA. 155+29.41		
206-10.00	CLASS 1 EXCAVATION	CU YD	144.5
702-11.00	CAST-IN-PLACE CONCRETE PILES	LIN FT	2,509
702-99.95	( )PILES BTS. 3 & 4	LIN.FT.	1,050
703-20.03	CLASS B CONCRETE (SUBSTR)	CU YD	351.5
703-40.04	CLASS B-1 CONCRETE (SUPSTR ON STEEL)	CU YD	432.6
703-80.25	STEEL REINFORCED ELASTOMERIC EXPANSION JOINT SEAL 12.5 IN.)	LIN FT	150
706-10.10	REINFORCING STEEL (BRIDGES)	POUND	118,330
706-99.96	REINFORCING STEEL BRIDGES (EPOXY COATED)	LB	52,210
712-10.10	FABRICATED STRUCTURAL CARBON STEEL (I-BEAM)	POUND	278,250
712-40.04	PAINTING (SYSTEM B OR C) GREEN	TON	138.8
714-10.00	BRIDGE RAIL (ONE TUBE)	LIN FT	611
	CONTINGENT ITEMS		
501.01	Bit Mat P Mix (85-100)	TON	79.6
501.02	Min Aggr P Mix Grade C	TON	1317
501.03	Asph. Cem (60-70 PA)	TON	1212.5
501.04	Min Aggr. (Asph Conc.) TYPE C MIX	TON	159
501.05	Density Samples	EACH	23
	INCL - 2316 C.Y ROUNDING		
	UNDER RADING - 511 C.Y = O.R. 2		

MISSOURI STATE HIGHWAY COMMISSION

SUMMARY OF QUANTITIES

(Quantities Within Maiden Urban Vicinity Limits)

SHEET 1 OF 2

JOB NO.		NO.
5	MO. TQF-TQFG-25-1(12)	2-B
DIST. NO.	COUNTY	ROUTE
10	DUNKLIN-NEW MADRID	25

PIPE CULVERTS GROUP II AND APPROACHES

Sheet	Station	Location	Type	Skew	Std.	Slope	Pipe 15" Lin. Ft.	Overfill Height Ft.	Type 2 Apron (Flume) E.Y.	Remarks
3	139+415	Lt.	C.E.	—	Special	—				No Pipe, Includes Shld. Swd. Sta. 138+75 to Sta 142+925
	140+32	Lt.	C.E.	—	Special	8%				No Pipe
	142+20	Lt.	C.E.	—	Special	5%				No Pipe
	144+15	Lt.	P.E.	—	20332	2.65%				No Pipe Used 30' Shldr. Radii
	146+20	Lt.	P.E.	—	20332	10%	42	3		
	146+80	Lt.	P.E.	—	20332	10%	42	3		
	148+20	Lt.	P.E.	15°00"Rt.	20332	10%	56	6		
4	142+44	Lt.	S.R.	19°30"Rt.	20330	4%	76	1	489.3	See Sp. Sh. #3
	142+44	Rt.	S.R.	19°30"Rt.	20330	4%	54	1		See Sp. Sh. #3
	144+80	Rt.	S.R.	—	20330	5%				No Pipe
	146+96	Lt.	S.R.	27°30"Rt.	20330	1%	84	1	285.4	See Sp. Sh #3
	146+96	Rt.	S.R.	27°30"Rt.	20330	8%	98	1		
	150+35	Rt.	P.E.	17°00"Rt.	20330	0%	46	1		Used 12' Shldr. Radii
	151+70	Lt.	F.E.	—	—	—				See Sp. Sh. #2
		TOTALS					498		774.7	

REINFORCED CONCRETE PIPE CULVERTS CLASS III

Sheet	Station	Loc.	Skew	RCP Class III 15" Lin. Ft.	18" Lin. Ft.	24" Lin. Ft.	30" Lin. Ft.	CLS Exc. C.Y.	Flared End Sec. 15" Each	18" Each	24" Each	Std. 604.05	Type S Hdwls Concrete C.Y.	Reinf. Steel Lbs.	Grates Cast Iron Lbs.	Remarks
3	144+80	℄	—			75		59								
	156+00	℄	55°RA				281	62								
4	140+62	℄	15°LA		113			23		2						
	147+75	℄	—	55				22	2							
		TOTALS		55	113	75	281	172	2	2	1	I-Lt.	3.0	110	300	S-Hdw Lt. End Sec. Rt.

CONCRETE CURB

Sheet	Station	Station	Loc.	Type S (144" Radius) Lin. Ft.	Type F Lin. Ft.	Remarks
3	139+415	140+92	Lt.	136		See Sp. Sh. #2
	140+92	142+20	Lt.	148		" " " "
	142+20	143+46	Lt.	144		" " " "
4	139+		Rt.		463	See Sp. Sh #1
	139+		Lt.		344	" " " "
	0+38.96	2+15.16	B/L "B"		157	" " " "
		TOTALS		428	954	

DRAIN BASINS AND UNDERDRAIN PIPE

Sheet	Station	Loc.	Drain Basins Each	6" CL-A Perf. Pipe Lin. Ft.	CL.3 Exc. C.Y.	Remarks
3	154+67	Lt.	1	150	52	Incl. 1-10"ℓ 1-67° Bend
	TOTALS		1	150	52	

SODDING

Sheet	Station	Station	Loc.	Sod S.Y.	Remarks
3	147+00	155+296	Lt. inslope	5657	Area of Br. Spillfill adj. to Conc. Slope Protection
	147+00	155+296	Rt. inslope	8506	" " " " " " " "
4	139+	CONN.	Rt.	629	Curbed Island, See Sp. Sh #1
	139	CONN.	Lt.	497	" " " " " "
		TOTAL		15289	

SEEDING AND MULCHING

Sheet	Seed Sq. FT.	Type 4 Mulch Sq. FT.
3	185007	185007
4	76839	76839
TOTALS	261846	261846
ACRES	6.0	6.0

GUARD RAIL

Sheet	Station	Loc.	Guard Rail Type A Lin. Ft.	Terminal Section Each	Bridge Anchor Section Each	Remarks
3	140+14	Rt.	25			Stripe Painted, Close St. @ RIW
	145+73	Rt.	25			" " " " "
	154+	Lt.	75	1	1	Install @ Br. End
	155+	Rt.	75	1	1	" " " "
	TOTALS		200	2	2	

RIGID STEEL CONDUIT IN TRENCH

Sheet	Station	Location	2" Cond. Lin. Ft.	3" Cond. Lin. Ft.
3	138+90	Rte. 25, 20.5' Lt. to 23.5' Rt.		44
4	5+30	B/L "A", 19' Lt. to 7' Rt.	26	
	1+70	B/L "B" 19' Lt. to 5' Rt.	24	
	TOTALS		50	44

MOVABLE BARRICADES

Total of 5

STANDARD CONSTRUCTION SIGNS

Lump Sum 1

REMOVAL OF IMPROVEMENTS

Lump Sum 1

FIELD LABORATORIES

Lump Sum 1

COMPACTING EMBANKMENT

Sheet	Station	C.Y.
3	138+15	
	142+62	573
	155+226	82,182
4	139+54	
	153+00	4724
	TOTAL	87479

FLASHER SIGNS

Sheet	Flasher Signs Each
3	2
TOTAL	2

MISSOURI STATE HIGHWAY COMMISSION

SUMMARY OF QUANTITIES

(Outside Malden Urban Vicinity Limits)

SHEET 1 OF 2.

DIST. NO.	COUNTY	ROUTE
10	DUNKLIN-NEW MADRID	25

MO. 76F-75F6-25-1(12) — 2-F

PIPE CULVERTS GROUP II & PIPE ARCHES

Sheet	Station	Location	Type	Skew	Sl%	% Grade	Pipe 15" Lin.Ft.	18" Lin.Ft.	24" Lin.Ft.	30" Lin.Ft.	48" Lin.Ft.	Cl.3 Exc. C.Y.	Over-fill Height Ft.	Type 2 Rock Base (6" Thick) S.Y.	Remarks
5	2+70	Relec. Loc. Rd Lt.	S.R.	—	2% Ab.										No Pipe
	172+00	Lt.	S.R.	10° Bk.	2% Ab.	1.2%		62					4	850.5	
	177+45	Lt.	F.E.	—	2% Ab.	1%			38				1		
	177+45	Rt.	F.E.	—	2% Ab.	1%		34					2		
7	197+50	Lt.	F.E.	—	2% Ab.	10%									No Pipe
	197+50	Rt.	F.E.	—	2% Ab.	10%		38					2		
8	225+77	Lt.	S.R.	12°45' Bk.	2% Ab.	3.4%								201.8	No Pipe
	265+27	Rt.	S.R.	12°45' Bk.	—	1.2%								827.3	No Pipe, See Sp. Sh. # 5
9	254+18	Lt.	F.E.	20° Bk.	2% Ab.	5%									No Pipe
	254+18	Rt.	F.E.	20° Ah.	2% Ab.	5%									No Pipe
	268+74	Lt.	F.E.	13° Ah.	2% Ab.	10%		38					2		
	262+74	Rt.	F.E.	13° Bk.	2% Ab.	6%		34					1		
10	27+55	Route 62 Rt.	C.E.	—	—	—									See Rev. Appr. & Sp. Sh. # 7
	28+35	Route 62 Rt.	C.E.	—	—	—									See Rev. Appr. & Sp. Sh. # 7
	29+90	Route 62 Rt.	F.E.	—	2% Ab.	3%			34				1		Used 12' Shldr. Rad.
	34+95	Route 62 Lt.	F.E.	15° Bk.	2% Ab.	6%				76		74	5		Includes 1-5° Bend, See Culv. Secs.
	39+16	Route 62 Rt.	F.E.	25° Ah.	2% Ab.	0%				66		32	6		Includes 1-5° Bend, See Culv. Secs.
	34+06	By-Pass ℄	—	20° RA	—	—					62	8	5		
	34+06	By-Pass ℄	—	20° RA	—	—					62	8	5		
	36+04	Route 62 Lane Rt.	—	—	—	—			42			21	5		Includes 1-10° Bend, See Culv. Sec.
	38+	Route 62	F.E.	—	2% Ab.	7%			40				2		
11	24+00	Lt.	F.E.	—	2% Ab.	9%									No Pipe
	28+00	Rt.	F.E.	—	2% Ab.	4%	32						1		
	302+65	Lt.	F.E.	—	2% Ab.	9%	34						2		
	302+65	Rt.	F.E.	20° Bk.	2% Ab.	5%	34						1		
	308+00	Lt.	F.E.	20° Bk.	2% Ab.	5%		34					1		
	308+00	Rt.	F.E.	15° Ah.	2% Ab.	5%		34					1		
12	322+70	Lt.	F.E.	—	2% Ab.	1%		32					1		
	322+70	Rt.	F.E.	—	2% Ab.	6%		32					1		
	328+40	Rt.	F.E.	—	2% Ab.	2%		32					1		
	337+45	Lt.	S.R.	20°55' Bk.	2% Ab.	0.9%								406.4	No Pipe
	337+45	Rt.	S.R.	20°55' Ah.	2% Ab.	0.9%								406.4	No Pipe
13	352+00	Outer Rd Lt.	F.E.	20° Bk.	2% Ab.	3%									No Pipe
	350+00	Route 62 Lt.	S.R.	—	2% Ab.	2%								132.8	No Pipe, Bit. Pvt. Ends 64' Lt.
	352+00	Outer Rd Rt.	S.R.	—	2% Ab.	2%									No Pipe
	366+	Route 62 Rt.	S.R.	20° Ah.	2% Ab.	0.8%		44					1	404.7	
15	7+50	By-Pass ℄	—	—	—	—	40					9	2		
	P.C.	By-Pass ℄	—	—	—	—	36					10	2		
	TOTALS						245	344	150	144	124	162		3229.9	

REINFORCED CONCRETE PIPE CULVERTS CLASS III

Sheet	Station	Loc.	Skew	R.C.P. Class III 18" Lin.Ft.	24" Lin.Ft.	30" Lin.Ft.	Cl.3 Exc. C.Y.	Flared End Sec. 18" Each	24" Each	30" Each	"Type S" Hdwls. Std. No. 604.CS	Cl. A Conc. Misc. C.Y.	Reinf. Steel lbs.	Grates & Bar Holders lbs.	Remarks
3	157+27	℄	50° RA.			188	21								
7	208+00	℄	—		73		14		1		1-Rt.	3.0	110	300	
	213+50	℄	—		63		22				2	6.0	220	600	
8	224+00	℄	—			91	50			2					
	226+30	℄	—			91	50			2					
	243+00	℄	—		57		29				2	6.0	220	600	
9	253+77	℄	—		57		17				2	6.0	220	600	
	258+92	℄	27°30' RA.			103	29			2					
	259+82	℄	25°30' RA.			101	39			2					
	263+15	℄	—	79			32	1			1-Rt.	2.2	90	300	
	270+55	℄	—		79		14		1		1-Rt.	3.0	110	300	
	276+50	℄	—			123	85			2					
	278+57	℄	20° L.A.			131	9			2					
11	284+00	℄	—		60		19				2	6.0	220	600	
	290+50	℄	—		77		50		1		1-Rt.	3.0	110	300	
	303+65	℄	30° L.A.		105		33		2						
	304+75	℄	30° L.A.		105		25		2						
12	314+50	℄	—		65		57				2	6.0	220	600	
	319+00	℄	—			91	53			2					
	325+00	℄	—		56		56				2	6.0	220	600	
	334+30	℄	—		151		36				2	6.0	220	600	
	338+00	℄	—	53			28				2	4.4	180	600	
13	346+00	℄	—			91	34			2					
	358+00	℄	—		76		26				2	6.0	220	600	

GUARD RAIL

Sheet	Station	Loc.	Guard Rail Type A Lin.Ft.	South Curb Bridge Terminal Anchor Sections Each	Bridge Terminal Anchor Sections Each	Remarks
3	158+	Lt.	75	1	1	Install @ Br. End
	158+	Rt.	75	1	1	" " "
	TOTALS		150	2	2	

CONCRETE SLOPE PROTECTION

Sheet	Sta.	S.Y.	Remarks
3	155+	1029.7	Br. End Spillfill Slopes
	158+	1092.8	Br. End Spillfill Slopes
	TOTAL	2122.5	

SODDING

Sheet	Sta.	Sta.	Loc.	Type	Depth	Sod S.Y.	Remarks
3	158+98	160+00	Lt.	Inslope	—	3692	Incl. Area of Bridge Spillfill Adj. to Conc. Slope Protection
	158+98	160+00	Rt.	Inslope	—	2046	" " " " "
5	160+00	170+00	Lt.	Inslope	—	10501	
	160+00	170+00	Rt.	Inslope	—	9200	
	186+00	—	Lt.	21'x80'	—	187	Outlet Spillway
7	207+95	208+05	Rt.	B.F.B.	2'	46	Gil 3:1 Slopes
				TOTAL		25472	

SEEDING AND MULCHING

Sheet	Seed Sq.Ft.	Type 4 Mulch Sq.Ft.	Remarks
5	270541	270541	
7	278179	278179	
7	2525109	2525109	Borrow Areas, See Sp. Sh. #4
8	224618	224618	
9	241,867	241,867	
10	135,066	135,066	Incl. By-Pass and Obliteration
11	273,661	273661	
	332,802	332,802	Borrow Area, See Sp. Sh. #8
12	267275	26 839	
13	391,903	389,743	Incl. By-Pass and Obliteration
14	16,880	16,880	" " " " "
TOTALS	4,496,590	4,954,305	
ACRES	114.0	113.7	

ENCASEMENT CONDUIT

Sheet	Sta.	Loc.	24" Cl. III RCP Lin.Ft.	Remarks
27	279+90	℄	130	See Culv. Secs.
	279+95	℄	130	" " "
	TOTAL		260	

COPPER WATER TUBE

2" Type K

MISSOURI STATE HIGHWAY COMMISSION

SUMMARY OF QUANTITIES

(Outside Malden Urban Vicinity)

SHEET 2 OF 2

DIST. NO.	COUNTY	ROUTE
5	MO.	E-B
10	DUNKLIN-NEW MADRID	25

TRAFFIC FLOW

CORRUGATED GALVANIZED METAL PIPE

Sheet	Station	Loc.	24" C.L.3 Etc. Lin. Ft.	C.Y.	Remarks
10	26+23.4	Lt.	46	31	Incl. 1-90° Bend, See Culv. Sec. & Br. Plans
	TOTALS		46	91	

CONCRETE BOX CULVERTS

Sheet	Station	Loc.	Std.	Wingwall Slopes	Size	Length Lin. Ft.	Skew	Section	Design Fill Ft.	Section Length Lin. Ft.	C.L.B. Conc. C.Y.	Reinf. Steel lbs.	C.L.3 Exc. C.Y.
9	257+67	℄	70350	2:1	4'x2'h'	90	—	A	4	45	16.9	1794	84
								B	4	45	15.9	1794	
	TOTALS										31.0	3588	84

COMPACTING EMBANKMENT

Sheet	Station	Loc.	C.Y.	Remarks
3&5	158+00	Rte 25	—	
5	170+35	"	17,132	
5	176+43	"	4421	
5&7	190+35	"	2804	
7	197+50	"	—	
	217+60	"	9549	
7&8	227+65	"	5734	
8	240+80	"	7107	
8&9	264+00	"	11401	
9	278+22	"	12,744	
10	26+73	Rte 62	—	
	91+68	"	605	
	32+00	"	—	
	40+00	"	2328	
	28+30.4	By-Pass	Rte 62 —	
	43+20	By-Pass	Rte 62 1,544	Incl. Emb. Comp. with Approach Slabs
9&11	278+22	Rte 25	—	
11	290+00	"	8862	
	296+50	"	1845	
	304+00	"	6656	
11&12	315+35	"	3600	
12	324+30	"	1023	
12&13	344+40	"	3114	
13	362+00	"	9566	
13&14	374+11	"	1028	
13	348+08	Rte 25	Conn. —	
	351+00	Rte 25	Conn. 1733	
15	342+50	By-Pass	—	
	350+90	By-Pass	857	
	354+41	By-Pass	—	
	365+53	By-Pass	1047	Incl. Emb. Comp. with Approach Slabs
	TOTAL		297,694	

PAVED APPROACHES - CONCRETE CURB & GUTTER

Sheet	Station	Station	Loc.	Paved Appr. 8" S.Y.	Curb & Gutter Type A Lin. Ft.	Remarks
10	26+75.8	27+28.5	Rt.	—	59	See Sp. Sh. #7
	27+28.5	27+81.5	Rt.	46.7	—	" " " "
	27+81.5	28+11.5	Rt.	—	30	" " " "
	28+11.5	28+54.9	Rt.	35.7	—	" " " "
	28+54.9	28+97.6	Rt.	—	46	" " " "
	TOTALS			82.4	129	

CONCRETE BOX CULVERT (Bridge Design A-3479)

Sheet	Station	Loc.	℄ Slope B Conc.	Reinf. Steel	C.L.3 Exc.	Remarks
10	35+78	℄	198.1	21450	776	Incl. Removal of Br. 1-143
	TOTAL		198.1	21450	776 *	* See X-Sec. Sheet # 29

COMPACTING IN CUT

Sheet	Station	Loc.	C.Y.	Remarks
11	296+20	Rt. & Lt.	1014	
11	308+00	"	930	
11&12	318+35	"	708	
12	324+30	"	1121	
12&13	344+30	"	5161	
13	363+00	"	739	
13&14	361+11	"	1977	
	TOTAL		11050	

CONCRETE CURB AND CONCRETE MEDIAN

Sheet	Station	Station	Loc.	Type S C.L.3 Under Lin. Ft.	Type F Lin. Ft.	Std. 208.50 Conc. Median S.Y.	Remarks
8	224+14.4	224+80	Lt.		134		See Sp. Sh. #5
	225+		Rt.			133.7	" " " "
	224+40	225+14.4	Rt.				" " " "
9	276+20.2	276+80.6	Rt.		122		See Sp. Sh. #6
	277+		Lt.			103.1	" " " "
	278+		Lt.			130.3	" " " "
	324+98.9	279+01.3	Lt.		127		" " " "
10	26+75.8	27+65	Rt.	82			See Sp. Sh. #7
	27+69		Rt.	13			" " " "
	28+24		Rt.	4			" " " "
	28+42		Rt.	5			" " " "
13	358+97.04	360+37.34	Rt.		143		See Sp. Sh # 9
	359+		Rt.			216.3	" " " "
	TOTALS			104	566	583.4	

RIGID STEEL CONDUIT IN TRENCH

Sheet	Station	Location	2" Cond. Lin. Ft.
9	276+20	Route 25-32' Lt. to 42' Rt.	74
	301+55	Route 62-23' Lt. to 23' Rt.	46
	277+25	Route 25-42' Lt. to 82' Rt.	74
13	358+30	Route 25-35' Lt. to 33' Rt.	68
	362+85	Route 25 Conn-23' Lt. to 23' Rt.	48
		TOTAL	310

CONCRETE GUTTER

Sheet	Station	Loc.	Type A Lin. Ft.	Remarks
8	3+13.1	Rt.	10	Curb Drain, See Sp. Sh. #5
9	276+	Rt.	43	Curb Drain, See Sp. Sh. #6
9	32+	Rt.	32	" " " " " "
10	29+	Rt.	19	See Sp. Sh. #7
13	358+60 Conn. 350+60	Lt.	26	" See Sp. Sh. #9
	TOTAL		129	

RELAID PIPE AND APPROACHES

Sheet	Station	Location	Type	Std.	% Grade	Length Lin. Ft.	Overfill Ft.	Remarks
13	362+35	Outer Rd. Lt.	F.E.	203.30	2%	36	1	Used Pipe from Sta. 364+00 By-Pass
	TOTAL					36		

INTERCEPTION DITCH

Sheet	Station	Station	100 L.F.	Remarks
7	205+00	208+40	3.4	Levee
	TOTAL		3.4	
	PAY		3	

FLASHER SIGNS

Sheet	Flasher Signs Each
10	2
13	3
14	1
TOTAL	6

MOVABLE BARRICADES

Total of 12

REMOVAL OF IMPROVEMENTS

Lump Sum 1

STANDARD CONSTRUCTION SIGNS

Lump Sum 1

MISSOURI STATE HIGHWAY COMMISSION

SUMMARY OF QUANTITIES

(Quantities Within Malden Urban Vicinity Limits)

SHEET NO. 2 OF 2

5	MO.	TQF-TQFG-25-1(12)	2-B
DIST. NO.	COUNTY		ROUTE
10	DUNKLIN-NEW MADRID		25

CAST IRON WATER PIPE AND FITTINGS

Sheet	Station	Station	Location	6" Lin.Ft.	8" Lin.Ft.	Fittings	Wright lbs.	Remarks
25	137+60	138+13	76'Rt. to 30'Rt.		92			Connect to Exist. 8" C.I.P.
	137+60		76'Rt.			8"-22½° Bend	110	
	138+07.3		75'Rt.			8"-45° Bend	110	
	138+11.7		71'Rt.			8"-45° Bend	110	
	138+11.8		67'Rt.			8"-45° Bend	110	
	138+11.9		69'Rt.			8"-45° Bend	110	
	141+00	149+25	49'Lt. to 107'Lt.	806				Connect to Exist. 6" C.I.P.
	141+00		49'Lt.			6"-11¼° Bend	75	
	143+60		67'Lt.			6"x6"x6" Tee	125	See Relocating Hydrants
	147+00		70'Lt.			6"-11¼° Bend	75	
	149+20		106'Lt.			6"x6"x6" Tee	125	
	149+25		107'Lt.			6"- Plug	30	
	TOTAL			806	92		980	

RELOCATING HYDRANTS

Sheet	Station	Location	Relocating Water Mains Hydrants Each	Relocating Water Mains 6" Lin.Ft.	Remarks
25	143+60	75'Lt.	1	7	Relocated From Sta. 145+38 - 6'Rt.
	149+20	112'Lt.	1	4	" " Sta. 149+29 - 124'Rt.
	142+76	47'Rt.	1	5	" " Sta. 142+76 - 35'Rt. Rte. 25 Conn.
	TOTALS		3	16	

RELOCATING GATE VALVES

Sheet	Station	Location	Each	Remarks
25	149+20	108'Lt.	1	Relocated From Sta. 149+12 - 120.6'Rt.
	TOTAL		1	

RELOCATING SERVICE CONNECTIONS

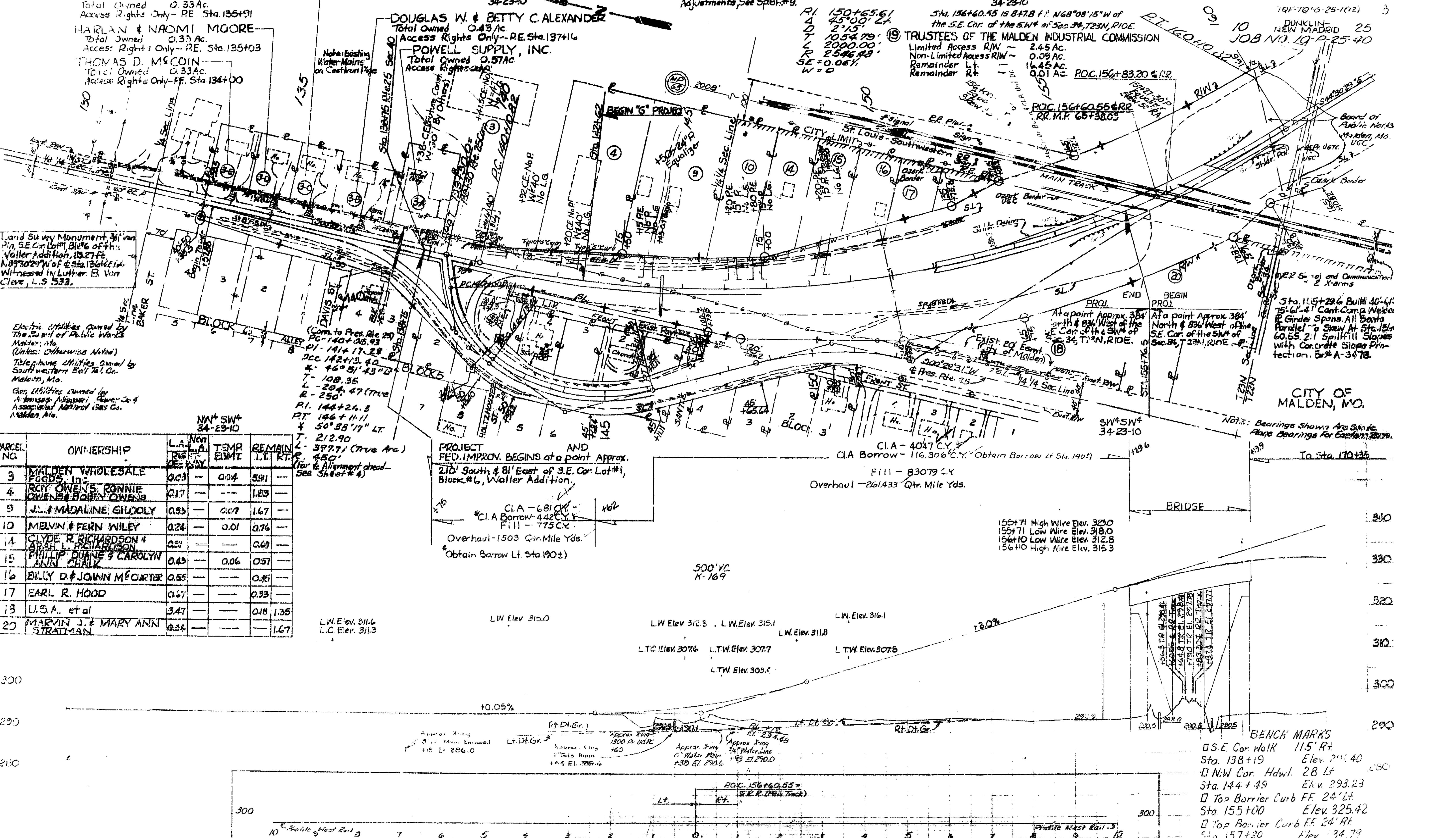
Sheet	Station	Location	Each	Remarks
25	144+81	Lt.	1	
	145+19	Lt.	1	
	145+70	Lt.	1	
	145+75	Lt.	1	
	145+82	Lt.	1	
	145+87	Lt.	1	U.I.P. Meter
	144+55	Lt.	1	
	TOTAL		7	

ENCASEMENT FOR WATER LINES

Sheet	Station	Location	Encasement Conduit 18"C.III R.C.P. Lin.Ft.	Remarks
25	138+12	27'Rt. to 61'Rt.	34	
	TOTAL		34	

ADJUSTING HOUSE SEWER CONNECTIONS

Sheet	Station	Location	Lin.Ft.	Remarks
25	144+80	Lt.	64	
	149+35	Lt.	101	
	TOTAL		165	



PARCEL NO.	OWNERSHIP	L.A. RIGHT OF WAY	Non L.A. RIGHT OF WAY	TEMP. ESMT.	REMAIN LT.	REMAIN RT.
3	MALDEN WHOLESALE FOODS, Inc.	0.03	—	0.04	5.91	—
4	ROY OWENS, RONNIE OWENS & BOBBY OWENS	0.17	—	---	1.83	—
9	J.L. & MADALINE GILCOLY	0.33	—	0.07	1.67	—
10	MELVIN & FERN WILEY	0.24	—	0.01	0.76	—
14	CLYDE R. RICHARDSON & ARAH L. RICHARDSON	0.51	—	—	0.43	—
15	PHILLIP DUANE & CAROLYN ANN CHALK	0.43	—	0.06	0.57	—
16	BILLY D. & JOANN McCURTER	0.55	—	---	0.45	—
17	EARL R. HOOD	0.67	—	—	0.33	—
18	U.S.A. et al	3.47	—	—	0.18	1.35
20	MARVIN J. & MARY ANN STRATMAN	0.34	—	—	—	1.67

Telephone Utilities Owned by Southwestern Bell Tel. Co. Malden, Mo.
Gas Utilities Owned by Arkansas-Missouri Power Co. & Associated Natural Gas Co. Malden, Mo.
Utilities Was Adjusted by owner.
4" Gas Line Right of Rte. 25 Conn. Sta. 142+75 to Sta. 145+00.

Note: Water Mains are Cast Iron Pipe

Note: For Additional Surface and Intersection details, See Special Sheets #1 & #2.

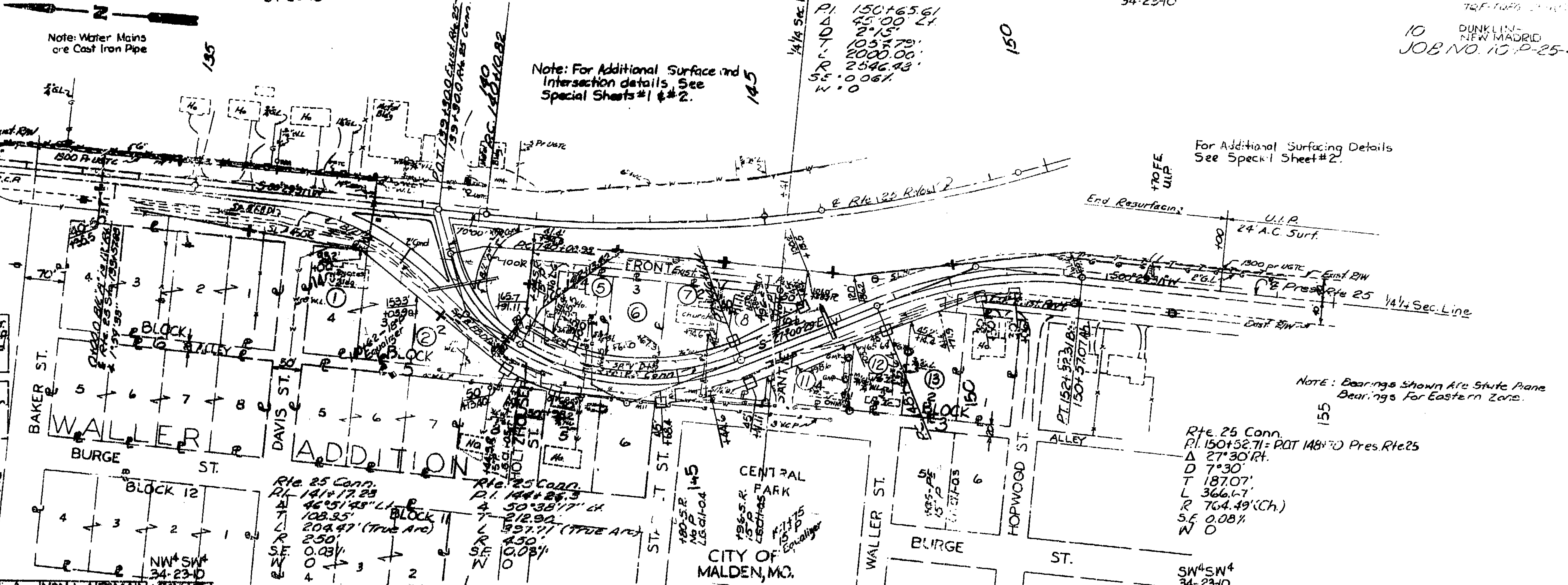
For Additional Surfacing Details See Special Sheet #2.

Note: Bearings Shown Are State Plane Bearings For Eastern Zone.

Land Survey Monument, 5/8" Iron Pin, S.E. Cor. Lot #1, Blk #6 of the Waller Addition. 83.21 ft. N 89°30'29"W of ℄ Sta. 136+61.64. Witnessed by Luther B. Van Cleve, L.S. 533.

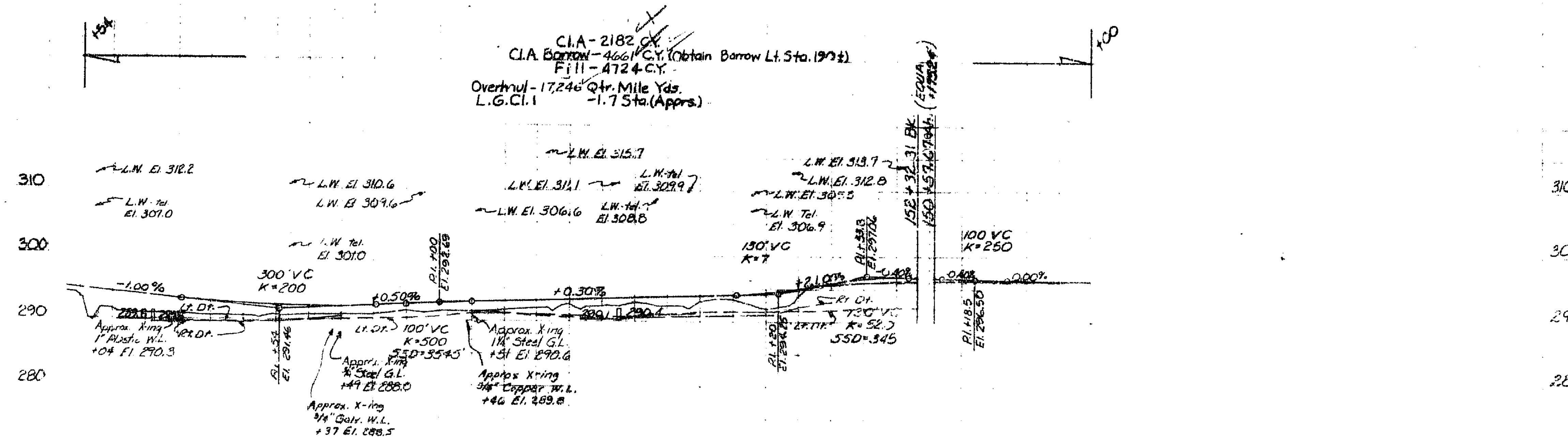
Land Survey Monument, 3/4" Iron Pipe, S.W. Cor. of Lot #1, Blk #5 of the Waller Addition 56.0 ft. S87°22'48"W of Sta. 142+13.4. Witnessed by Luther B. Van Cleve, L.S. 533.

Land Survey Monument, 3/4" Iron Pipe, S.E. Cor. of Lot #1, Blk #9 of the Waller Addition. 130.53 ft. N 39°06'20"W of Sta. 152+52.31 Bk. Witnessed by Luther B. Van Cleve, L.S. 533.

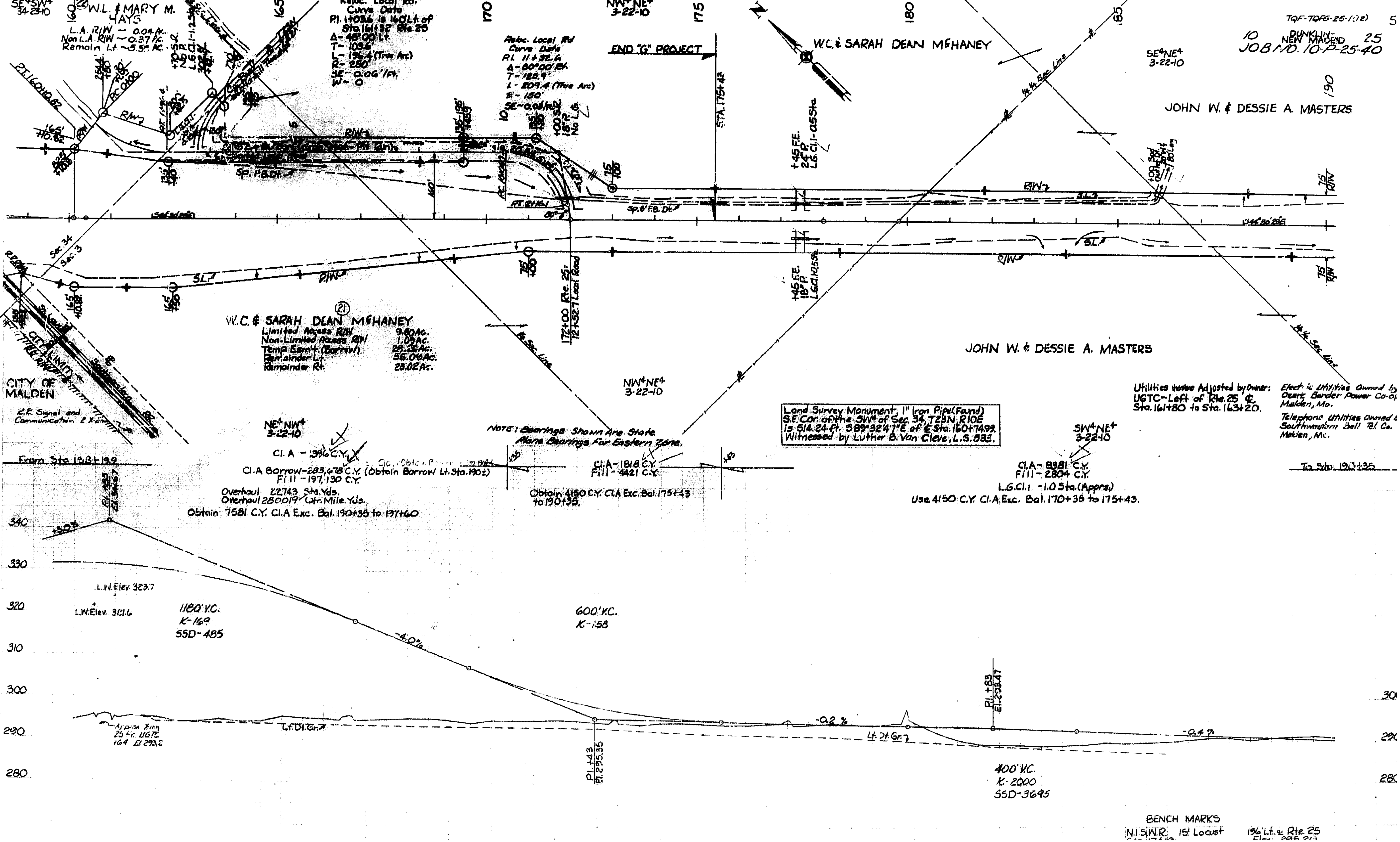


PARCEL NO.	OWNERSHIP	L.A. R/W	NON L.A. R/W	REMAIN LT.	REMAIN RT.	ESMT. TEMP.
1	MALDEN JUNIOR CHAMBER OF COMMERCE, A CORP.	0.09	—	—	7.55	—
2	FOUR COUNTY FARM CENTER, INC.	0.51	0.07	—	0.25	0.01
5	J.D. UTHOFF	—	0.14	0.27	—	—
6	HELEN WALLER, et al.	—	0.11	0.30	—	—
7	TRUSTEES FOR CITY OF MALDEN, MO. CONGREGATION OF JEHOVAH'S WITNESSES	—	0.15	0.26	—	—
8	ENOCH A. TOLLESON	—	0.20	0.17	0.04	—
11	EDITH WOODHAM	—	0.21	—	0.20	—
12	RONALD & BRENDA SMITH	—	0.10	—	0.31	—
13	HELEN WALLER	—	0.01	—	0.40	—

Cl.A - 2182 C.Y.
Cl.A Borrow - 4661 C.Y. (Obtain Borrow Lt. Sta. 190±)
Fill - 4724 C.Y.
Overhaul - 17,246 Qtr. Mile Yds.
L.G.Cl.1 - 1.7 Sta. (Apprs.)



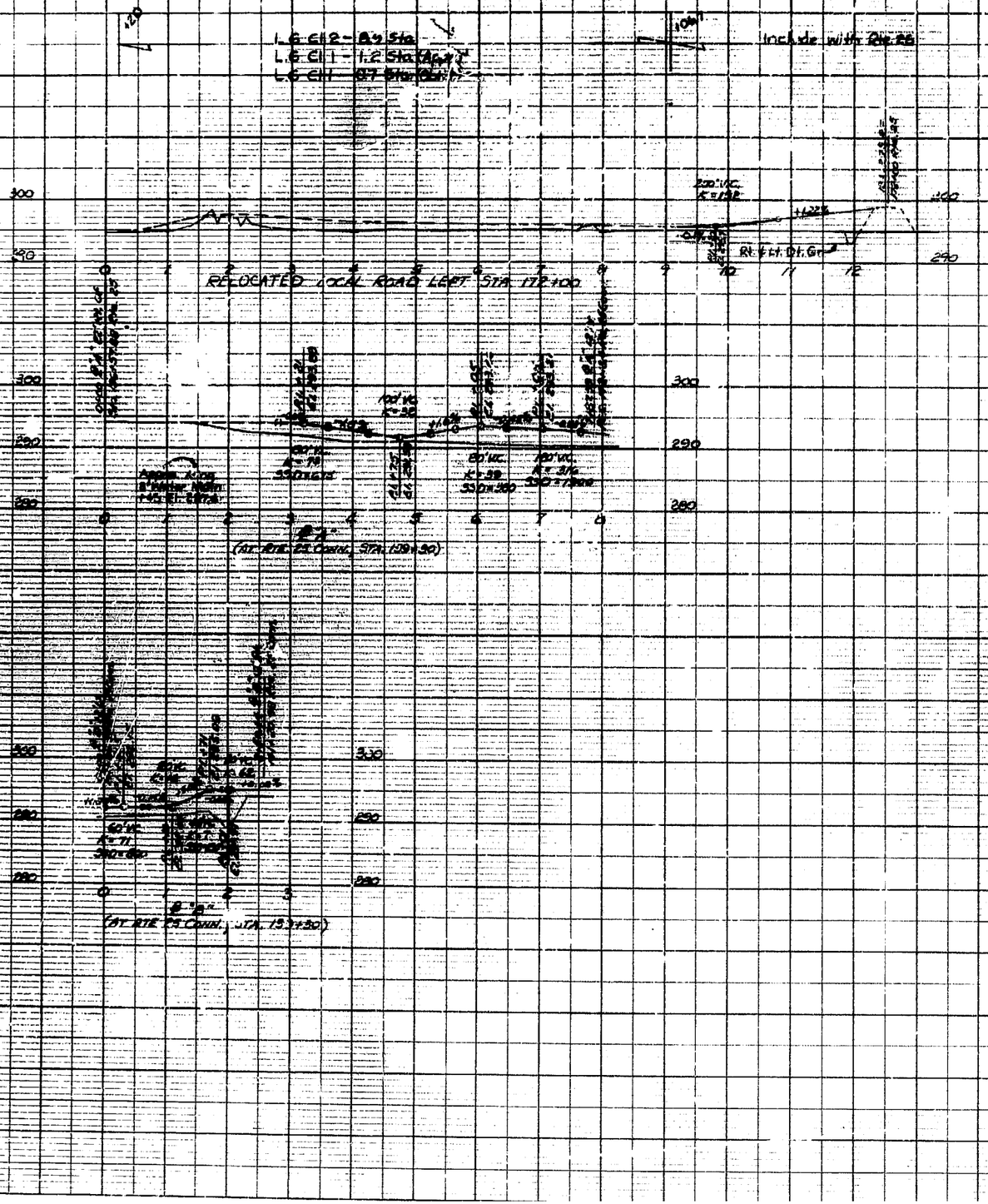
BENCH MARKS
□ on N.W. Cor. Conc. Hdwl. 32' Lt. Sta. 144+49 Elev. 293.83
□ Top Barrier Curb F.S. 24' Lt. Sta. 155+00 Elev. 325.42

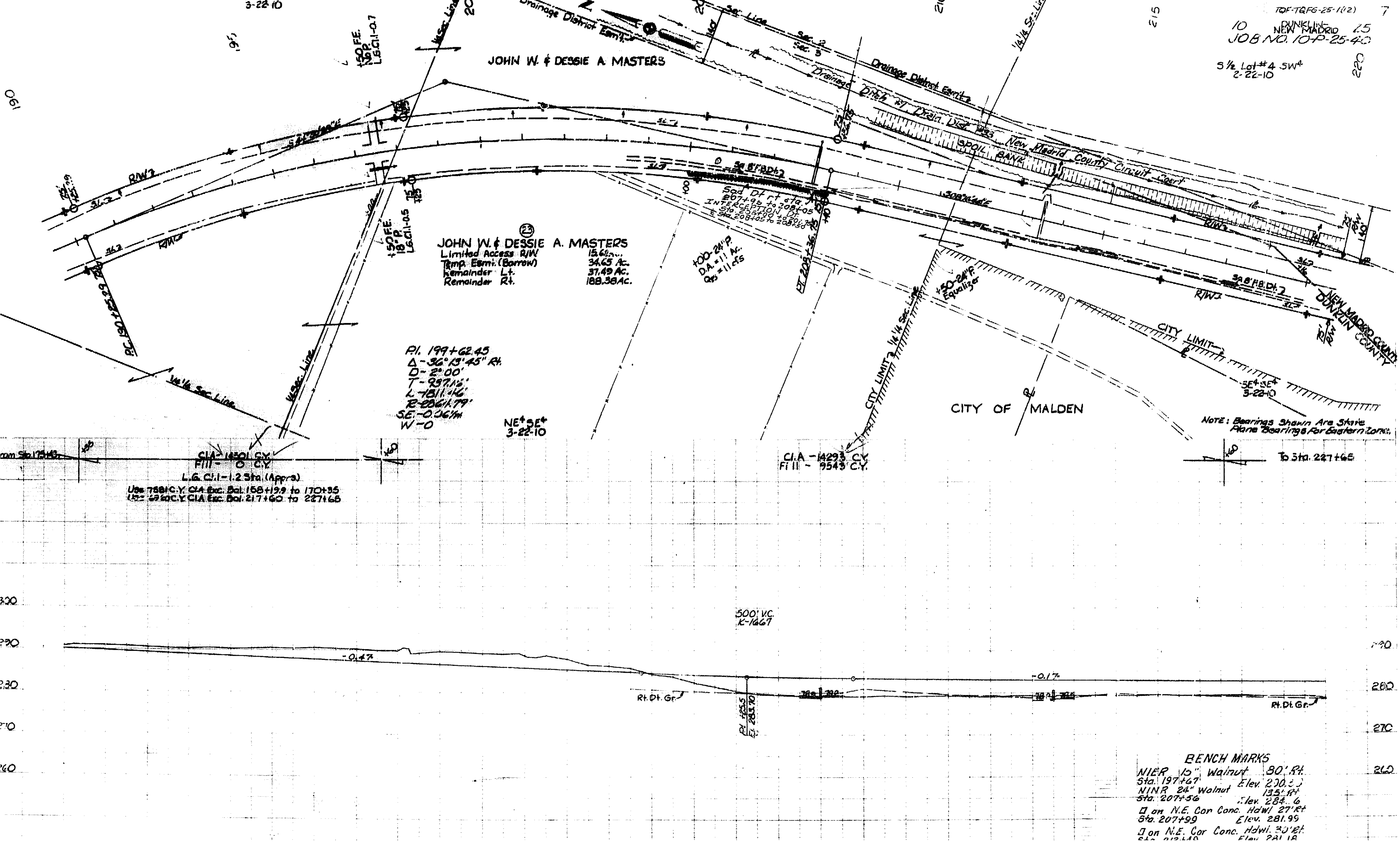

W.L. & MARY M. HAYS
W.C. & SARAH DEAN McHANEY
END "G" PROJECT
JOHN W. & DESSIE A. MASTERS
W.C. & SARAH DEAN McHANEY
Limited Access R/W 9.80Ac.
Non-Limited Access R/W 1.09Ac.
Temp. Esmt. (Borrow) 28.35Ac.
Remainder Lt. 56.09Ac.
Remainder Rt. 23.02Ac.
JOHN W. & DESSIE A. MASTERS
CITY OF MALDEN
NW4NE4 3-22-10
NE4NW4 3-22-10
SE4NE4 3-22-10
SW4NE4 3-22-10
Note: Bearings Shown Are State Plane Bearings For Eastern Zone.
Land Survey Monument, 1" Iron Pipe (Found) S.E. Cor. of the SW4 of Sec. 34, T23N, R10E Is 514.24 ft. S89°32'47"E of ℄ Sta. 160+74.99. Witnessed by Luther B. Van Cleve, L.S. 583.
Utilities to be Adjusted by Owner: UGTC—Left of Rte. 25 ℄ Sta. 161+80 to Sta. 163+20.
Electric Utilities Owned by Ozark Border Power Co-op Malden, Mo.
Telephone Utilities Owned by Southwestern Bell Tel. Co. Malden, Mo.
Cl. A - 396 C.Y.
Cl. A Borrow - 283,678 C.Y. (Obtain Borrow Lt. Sta. 190±)
Fill - 197,130 C.Y.
Overhaul 22,743 Sta. Yds.
Overhaul 280,019 Qtr. Mile Yds.
Obtain 7581 C.Y. Cl. A Exc. Bal. 190+35 to 137+60
Cl. A - 1818 C.Y.
Fill - 4421 C.Y.
Obtain 4150 C.Y. Cl. A Exc. Bal. 175+43 to 190+35.
Cl. A - 8981 C.Y.
Fill - 2804 C.Y.
L.G.Cl. I - 1.0 Sta. (Approx)
Use 4150 C.Y. Cl. A Exc. Bal. 170+35 to 175+43.
From Sta. 158+19.9
To Sta. 190+35
1180' V.C.
K-169
SSD-485
600' V.C.
K-158
400' V.C.
K-2000
SSD-3695
-4.0%
-0.2%
-0.4%
+5.0%
L.W. Elev. 323.7
L.W. Elev. 321.6
P.I. +43 El. 295.35
P.I. +83 El. 293.47
BENCH MARKS
N.I.S.W.R. 15' Locust
156' Lt. ℄ Rte. 25

TGF. TQFG-25-I(12) | 6

10 DUNKLIN-NEW MADRID | 25

JOB NO. 10-P-25+40




TQF-TQFG-25-1(12) 7
DUNKLIN
NEW MADRID 25
JOB NO. 10-P-25-40
JOHN W. & DESSIE A. MASTERS
S ½ Lot #4 SW¼
2-22-10
Drainage District Esmt.
Drainage Ditch #1 Drain. Dist. #3
SPOIL BANK
New Madrid County Circuit Court
JOHN W. & DESSIE A. MASTERS
Limited Access R/W 15.61Ac.
Temp. Esmt. (Borrow) 34.65 Ac.
Remainder Lt. 37.49 Ac.
Remainder Rt. 188.38 Ac.
P.I. 199+62.45
Δ-36°13'45" Rt.
D-2°00'
T-937.15'
L-1811.46'
R-2061.79'
S.E.-0.06'/ft
W-0
NE¼ SE¼
3-22-10
CITY LIMIT
CITY OF MALDEN
SE¼ SE¼
3-22-10
NEW MADRID COUNTY
DUNKLIN COUNTY
NOTE: Bearings Shown Are State Plane Bearings For Eastern Zone.
Cl.A - 14301 C.Y.
Fill - 0 C.Y.
L.G. Cl.1-1.2 Sta.(Appro.)
Use 7681 C.Y. Cl.A Exc. Bal. 158+19.9 to 170+35
Cl.A - 14293 C.Y.
Fill - 9543 C.Y.
To Sta. 227+65
500' V.C.
K-1667
-0.47
-0.17
Rt. Dt. Gr.
BENCH MARKS
NIER 15" Walnut 80' Rt.
Sta. 197+67
NINR 24" Walnut
Sta. 207+56
Elev. 284.6
□ on N.E. Cor Conc. Hdwl 27' Rt
Sta. 207+99 Elev. 281.99
□ on N.E. Cor Conc. Hdwl. 30' Rt.
Elev. 281.18

T&F-T-0F6-25-1(12) 8

DUNKLIN 10 — NEW MADRID 25

JOB NO. 10-P-25-40

S½ Lot #4 SW4 2-22-10

N½ Lot #4 NW4 11-22-10

S½ Lot #4 NW4 11-22-10

220 225 230 235 240 245 250

(23A) RAYBURN S. WHITENER et al

Limited Access R/W	0.21 Ac.
Perm. Esmt. (Sight Dist.)	0.10 Ac.
Remainder Lt.	1.79 r.c.

(24) JOSEPH ELMER HECK & GOLDIE M. HECK

Limited Access R/W	11.81 Ac.
Perm. Esmt. (Sight Dist.)	0.17 Ac.
Temp. Esmt. (Removal)	0.01 Ac.
Remainder Lt.	80.61 Ac.
Remainder Rt.	14.58 r.c.

N

Drainage District Esm't — Drainage Ditch #1 — Drainage District #38 New Madrid Co. Circuit Court

Perm. Esmt. (Sight Distance)

SPOIL BANK

Sec. 3 / Sec. 10 / Sec. 11

SR 8' F.B. Dt. 3

Note: For Intersection Details See Special Sheet No. 5.

JOHN W. & DESSIE A. MASTERS SE4 SE4 3-22-10

NEW MADRID — DUNKLIN COUNTY

CITY LIMITS

JOSEPH ELMER HECK & GOLDIE M. HECK

S½ Lot #4 NW4 11-22-10

Sec. Line — ¼ ¼ Sec. Line

NE4 NE4 10-22-10

SE4 NE4 10-22-10

Telephone Utilities Owned by Southwestern Bell Tel. Co. Malden, Mo

Land Survey Monument Iron Bar. The Cor. of Frac. Secs. 3 and 10 T22N, R10E is 210.37 ft. N 89°19'14" W of ℄ Sta. 225+18.47. Witnessed by Luther B. Van Cleve, L.S. 533

CITY OF MALDEN

NOTE: Bearings Shown Are State Plane Bearings for Eastern Zone.

From Sta. 217+60 — To Sta. 264+00

C.I.A. - 1704 C.Y.
Fill - 5748 C.Y.
Overhaul 41520 Sta. Yds.
Obtain 6920 C.Y. C.I.A. Exc. Bal. 190+35 to 197+60

C.I.A. - 1650 C.Y.
C.I.A. Borrow - 86.16 C.Y. (Obtain Borrow Lt. Sta. 190±)
Fill - 7107 C.Y.
Overhaul 7781 Qtr. Mile Yds.

300' V.C. K-3000

-0.1% — 0.0% — Undergrading — To Sta. 254+70

Rt. Dt. Gr. — Lt. Dt. Gr. — Rt. & Lt. Dt. Gr.

2+00.0 B/L = 225+42.77 Rt. 25

100' V.C. K-833 — 100' V.C.

280 — 0.0% — +3.0% — -1.20% — 0.0% — 280

BENCH MARKS

N.I.W.R. 36" Cottonwood 208' Lt. Sta. 225+33 Elev. 280.14

N.I.S.R. 36" B. Oak 122' Lt.

JOB NO. 10-P 25-40

Electric Utilities Owned by The Board of Public Works Malden, Mo. (Unless Otherwise Noted)

Telephone Utilities Owned by Southwestern Bell Tel. Co. Malden, Mo.

Gas Utilities Owned by Arkansas-Missouri Power Co. & Associated Natural Gas Co. Malden, Mo.

JOSEPH ELMER HECK & GOLDIE M. HECK

N½ Lot# 4 SW¼ 11-22-10

S½ Lot# 4 SW¼ 11-22-10

ANN HASKINS BOSTIC et al.

DUNKLIN-NEW MADRID

CITY OF MALDEN

BERNADINE H. WERNER et al

Drainage District Esm't

Drainage Ditch #1

Drainage District #3

New Madrid Co. Circuit Court

St. Louis Southwestern R.R.

P.O.T. 259+31.23 ℄ R.R. R.R.M.P. 57+17.77

Note: Removals Sta. 277+ to Sta. 281+ shall include underground storage tanks within R/W.

Note: For Route 62 Intersection Details, See Sp. Sh. #64 #7.

FIDELIS P. & WILLIAM A. TELKER
L.A. R/W 0.94 Ac. S.E. - 0.05 Ivt.
Temp. Esm't (Renwl) - 0.01 Ac. W - 0
Remain Lt. 0.63 Ac.
Remain Rt. 0.73 Ac.

(26) ANN HASKINS BOSTIC et al.
Limited Access R/W
Remainder Lt. 6.08 Ac.
Remainder Rt. 346.92 Ac.
10.00 Ac.

P.I. 266+19.22
Δ - 10°58'45" Rt.
D - 1°20'
T - 412.98'
L - 823.44'
R - 4297.18'

Land Survey Monument, 1" Iron Bar. The Cor. of Sec's. 10, 11, 14 & 15, T 22 N, R 10 E is 455.76 ft. N 87°02' W of ℄ Sta. 279+73.31. Witnessed by Luthner B. Van Cleve, L.S. 633

NOTE: Reflectorized Railroad Advance Warning Signs And Pavement Markings Were Installed By State.

Flashing Light Signals Were installed by Railroad

NOTE: Bearings Shown Are State Plane Bearings For Eastern Zone.

NOTE: Bypass Was Obliterated When No Longer Needed.

CITY OF MALDEN, MO.

Sta. 279+14 & Sta. 279+79 Exist. 15" V.C.P. Sanitary Sewer Crossings Were not Disturbed by U.I.P.

Water Meters Removed were salvaged for City.

For Additional Water Line & Sanitary Sewer Adjustments, See Sp. Sh. #12

SE¼ NE¼ 10-22-10

NE¼ NE¼ 15-22-10

From Sta. 246+50

Cl. A - 12'90 C.Y.
Cl. A Borrow - 15226 C.Y. (Obtain Borrow Lt. Sta. 190+)
Fill - 1140 C.Y.
Overhaul - 39588 Qtr. Mile Yds.
L.G. Cl. 1 - 2.2 Sta. (Approx.)

Cl. A - 700 C.Y.
Cl. A Borrow - 17021 C.Y. (Obtain Borrow Lt. Sta. 190+)
Fill - 12233 C.Y.
Overhaul - 88509 Qtr. Mile Yds.

To Sta. 282+00

L.T.G. Elev 277.8

Approx. X-ing 2" Gas Main 1.65 Rt. El. 277.6

Approx. X-ing 2" Water Main 1.76 Rt. El. 278.8

Approx. X-ing 15" R.C.P. 1.95 Rt. El. 275.5

From Sta. 232+00 —— Undergrading

300' V.C. K - 1500

400' V.C. K - 1333.3 SSD - 250

300' V.C. K - 3000

P.I. +20 El. 282.85

P.I. +35 El. 281.90

0.0% +0.20% -0.10% 0.00%

BENCH MARKS

"D" on N.E. Cor. Conc. Hdwl. 45' Rt. Sta. 257+65 Elev. 280.28

"D" on N.W. Wingwall Rt. Bk. 122' Lt. Sta. 258+53 Elev. 282.89

"D" on N.E. Cor. Conc. Hdwl. 32' Rt. Sta. 262+14 Elev. 279.58

W.I.S.W.R. 8" Triple Cherry 126' Lt. Sta. 266+03 Elev. 281.37

CITY OF MALDEN

ANN HASKINS BOSTIC et al.

Note:
* For Additional Route 62 Intersection Details, See Sp Sheets No 6 & 7

Drainage Ditch #1
Drainage District #38
New Madrid Co
Circuit Court

35+78 Build 2(8'x5') Box Culvt.
Skew 23° R.A. ~ Bi: *A-5419
Clean Out Channel 16 ft. Bottom
2:1 Slopes, Within R/W.

Drainage District #38

Lot Line

E Existing Rte 62 & E New Construction
PI ~ 41+91.0
Δ ~ 11° 25' Lt
D ~ 3°
T ~ 190.9'
L ~ 380.6'
R ~ 1910.08'
S.E. ~ See Sp. Sh. #7

Existing Rte. 62
A 39+04.6
R. 1+91.0
PT. 44+75.2
Δ ~ 11° 25' Lt
D ~ 2°
T ~ 286.4'
L ~ 570.8'
R ~ 2864.9'

JOB NO. 10-22-10

ANN HASKINS BOSTIC et al.

Note: Right Of Way Dimensions Are Referenced To The Curve Data Ahead Of Sta. 39+04.6

Electric Utilities Owned By The Board of Public Works Unless Otherwise Noted.

Telephone Utilities Owned By Southwestern Bell Tel Co Malden, Mo.

Gas Utilities Owned by Arkansas-Missouri Power Co & Associated Natural Gas Co, Malden, Mo.

UGTC Was Adjusted by Owner Right of Route 62 Sta 37+50 to Sta 40+25

PT. 43+30.7 Bk* Ah. Construction ℄
43+79.9
43+89.3 By Pass

PT. 44+75.2

Exist R/W ℄
Existing Surface
Exist R/W ℄
UGTC (150 PR) 12

BERNADINE H. WERNER et al

NOTE: By-Pass Was Obliterated When No Longer Needed

PARCEL NO.	OWNERSHIP	T/A R/W	NON R/W	TEMP. EASE. Land	TEMP. EASE. Imp.	R.S. MAIN ST.
27	TOM & GERTIE GOLDS et al	0.47	—	0.5	—	0.77
28	J.L. & VIRGINIA COKER	1.16	—	—	—	—
29	MARY WERNER	0.43	—	—	—	—
31A	RUTH ELIZABETH KOCHTITZKY POUCHER et al	—	—	—	0.30	—

NE¼ NE¼ 15-22-10

N½ Lot #4 NW¼ 14-22-10

N½ Lot #3 NW¼ 14-22-10

C.I.A. - 197 C.Y.
C.I.A Borrow - 701 C.Y. (Obtain Borrow Lt. Sta.)
Fill - 620 C.Y.
L.G.Cl. 1 - 0.6 Sta. (Apprs.)
Overhaul - 4066 Qtr. Mile Yds.

C.I.A. - 2339 C.Y.
C.I.A Ch. Cl-Out - 141 C.Y.
C.I.A Borrow - 1024 C.Y. (Obtain Borrow Lt. Sta. 1901)
Fill - 2419 C.Y.
L.G.Cl. 1 - 1.4 Sta. (Apprs.)
Overhaul - 6246 Qtr. Mile Yds.

PROFILE RTE. 62

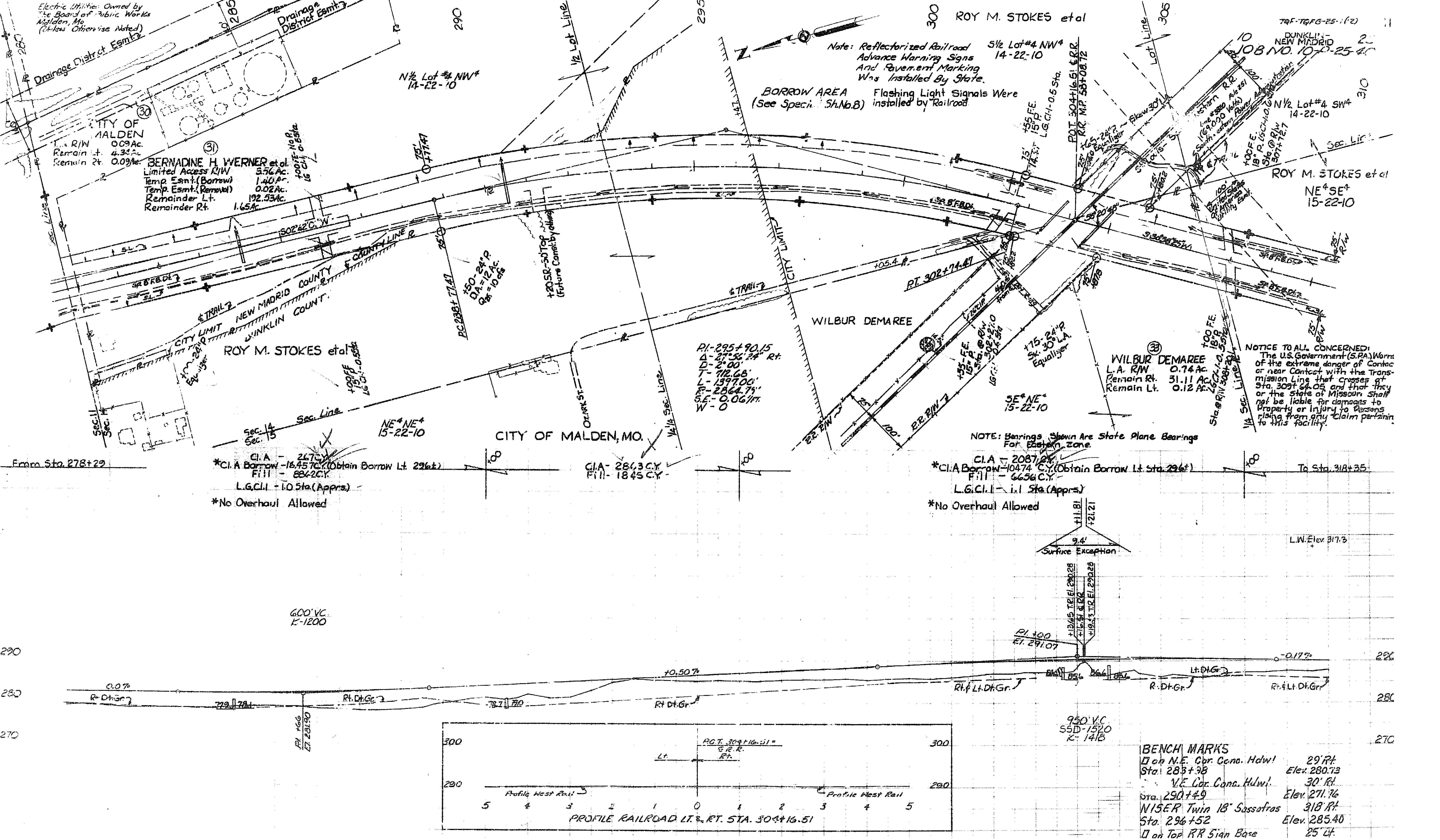
C.I.A - 2290 C.Y.
*C.I.A Borrow - 3113 C.Y. (Obtain Borrow Lt. Sta. 2961)
Fill - 2863 C.Y.

C.I.A - 3825 C.Y. } Oblit.
Fill - 2502 C.Y. }

*No Overhaul Allowed

PROFILE BY-PASS RTE. 62

BENCH MARKS
Brass N.W. Cor. Conc. Hdwl. ... Sta. 35+55 (Pte. 62) Elev. ...
Brass Cap in N. Wall ... Sta. ...+40 (Pte. 62) Elev. ...


Electric Utilities Owned by The Board of Public Works Malden, Mo. (Unless Otherwise Noted)
Drainage District Esmt.
ROY M. STOKES et al
Note: Reflectorized Railroad Advance Warning Signs And Pavement Marking Was Installed By State.
S½ Lot #4 NW4 14-22-10
DUNKLIN - NEW MADRID
JOB NO. 10-P-25-4
N½ Lot #4 NW4 14-22-10
BORROW AREA (See Speci. Sh. No. 8)
Flashing Light Signals Were installed by Railroad
N½ Lot #4 SW4 14-22-10
CITY OF MALDEN
T.L. R/W 0.09Ac.
Remain Lt. 4.34Ac.
Remain Rt. 0.09Ac.
BERNADINE H. WERNER et al.
Limited Access R/W 3.56Ac.
Temp. Esmt.(Borrow) 1.40Ac.
Temp. Esmt.(Removal) 0.02Ac.
Remainder Lt. 192.53Ac.
Remainder Rt. 1.65Ac.
ROY M. STOKES et al
NE4 SE4 15-22-10
PT. 302+74.47
PC 288+77.47
CITY LIMIT
NEW MADRID COUNTY
DUNKLIN COUNTY
ROY M. STOKES et al
WILBUR DEMAREE
P.I.-295+90.15
Δ-27°56'24" Rt.
D-2°00'
T-712.68'
L-1397.00'
R-2864.79'
S.E.-0.061/FT.
W-0
WILBUR DEMAREE
L.A. R/W 0.74Ac.
Remain Rt. 31.11 Ac.
Remain Lt. 0.12 Ac.
NOTICE TO ALL CONCERNED: The U.S. Government (S.P.A.) Warns of the extreme danger of Contact or near Contact with the Transmission Line that crosses at Sta. 309+64.05 and that They or the State of Missouri Shall not be liable for damages to Property or Injury to Persons rising from any Claim pertaining to this facility.
SE4 NE4 15-22-10
NE4 NE4 15-22-10
CITY OF MALDEN, MO.
NOTE: Bearings Shown Are State Plane Bearings For Eastern Zone.
From Sta. 278+29
Cl. A - 267C.Y.
*Cl. A Borrow - 18,457C.Y. (Obtain Borrow Lt. 296±)
Fill - 8842C.Y.
L.G.Cl.1 - 1.0 Sta. (Apprs)
*No Overhaul Allowed
Cl. A - 2863C.Y.
Fill - 1845C.Y.
Cl. A - 2087C.Y.
*Cl. A Borrow - 10474 C.Y. (Obtain Borrow Lt. Sta. 296±)
Fill - 6656C.Y.
L.G.Cl.1 - 1.1 Sta. (Apprs)
*No Overhaul Allowed
To Sta. 318+35
9.4'
Surface Exception
L.W. Elev. 317.3
600' V.C.
K-1200
P.I. +00
El. 291.07
-0.175%
+0.50%
0.0%
Rt. Dt. Gr.
Lt. Dt. Gr.
Rt. & Lt. Dt. Gr.
950' V.C.
SSD-1520
K-1418
P.I. +66
El. 281.90
290
280
270
P.C.T. 304+16.51 = ℄ R.R.
Profile West Rail
PROFILE RAILROAD LT. & RT. STA. 304+16.51
BENCH MARKS
□ on N.E. Cor. Conc. Hdwl 29' Rt.
Sta. 283+38 Elev. 280.73
V.E. Cor. Conc. Hdwl 30' Rt.
Sta. 290+49 Elev. 271.76
WISER Twin 18" Sassafras 318' Rt.
Sta. 296+52 Elev. 285.40
□ on Top RR Sign Base 25' Lt.

TQF-TQFS-25(12) 12

DUNKLIN-NEW MADRID 10 25

JOB NO. 10-D-25-40

UNITED STATES OF AMERICA (SOUTHWESTERN POWER ADMINISTRATION)

ROY M. STOKES et al

(34) ROY M. STOKES et al

Limited Access R/W	15.14 Ac.
Temp. Esmt. (Borrow)	6.78 Ac.
Remainder Lt.	120.76 Ac.
Remainder Rt.	74.10 Ac.

NOTICE TO ALL CONCERNED:
The U.S. Government (SPA) Warns of the extreme danger of contact or near contact with the Transmission Line that Crosses at Sta. 329+77.8 and that they or the State of Missouri shall not be liable for damages to property or injury to Persons rising from any claim pertaining to this facility.

Pl. 329+67.43
Δ - 7°15'34" Lt.
D - 0°30'
T - 726.92'
L - 1451.39'
R - 11459.16'
S.E. - 0'/FT

Line #3320 Pole 246 Southwestern Power Administration (69,000 V.)

Line #3320 Pole 247 Southwestern Power Administration (69,000 V.)

Line #3320 Pole 250 Southwestern Power Administration (69,000 V.)

Electric Utilities Owned by Ozark Border Power Co-op Malden, Mo. (Unless Otherwise Noted)

Telephone Utilities Owned By Southwestern Bell Tel. Co. Malden, Mo.

Land Survey Monument, 1" Iron Bar, The Cor. of Sec's. 14, 15, 22 & 23 T22N, R10E is 1552.67' S88°14'51"E of ℄ Sta. 337+47.25. Witnessed by Luther B. Van Cleve, L.S. 533.

NOTE: Bearings Shown Are State Plane Bearings For Eastern Zone.

NE¼ SE¼ 15-22-10

SW¼ SE¼ 15-22-10

NW¼ NE¼ 22-22-10 CLAY H. & GEORGE S. NAPPER JR. 5/11 Pr. UGTC.

CLAY H. & GEORGE S. NAPPER JR.

ROY M. STOKES et al

1¼ Sec. Line

From Sta. 308+00

C.I.A - 7215 C.Y.
*C.I.A Borrow - 4575 C.Y. (Obtain Borrow Lt. Sta. 23% ±)
Fill - 3600 C.Y.
L.G. C.I.1 - 1.1 Sta. (Appr.)

*No Overhaul Allowed

C.I.A - 1790 C.Y.
Fill - 1023 C.Y.
L.G. C.I.1 - 1.0 Sta. (Appr.)

C.I.A - 5432 C.Y.
Fill - 3154 C.Y.
L.G. C.I.1 - 0.5 Sta. (Appr.)

To Sta. 344+30

L.W. Elev. 322.8

+60 L.W. Elev. 310.1

600' V.C.
K-2400

-0.17%

+0.08%

Rt. & Lt. Dt. Gr.

Pl. +00 288.52

Approx. X-ing UGTC +93, Elev. 289.3

Profile Co. Rd Sta. 337+49

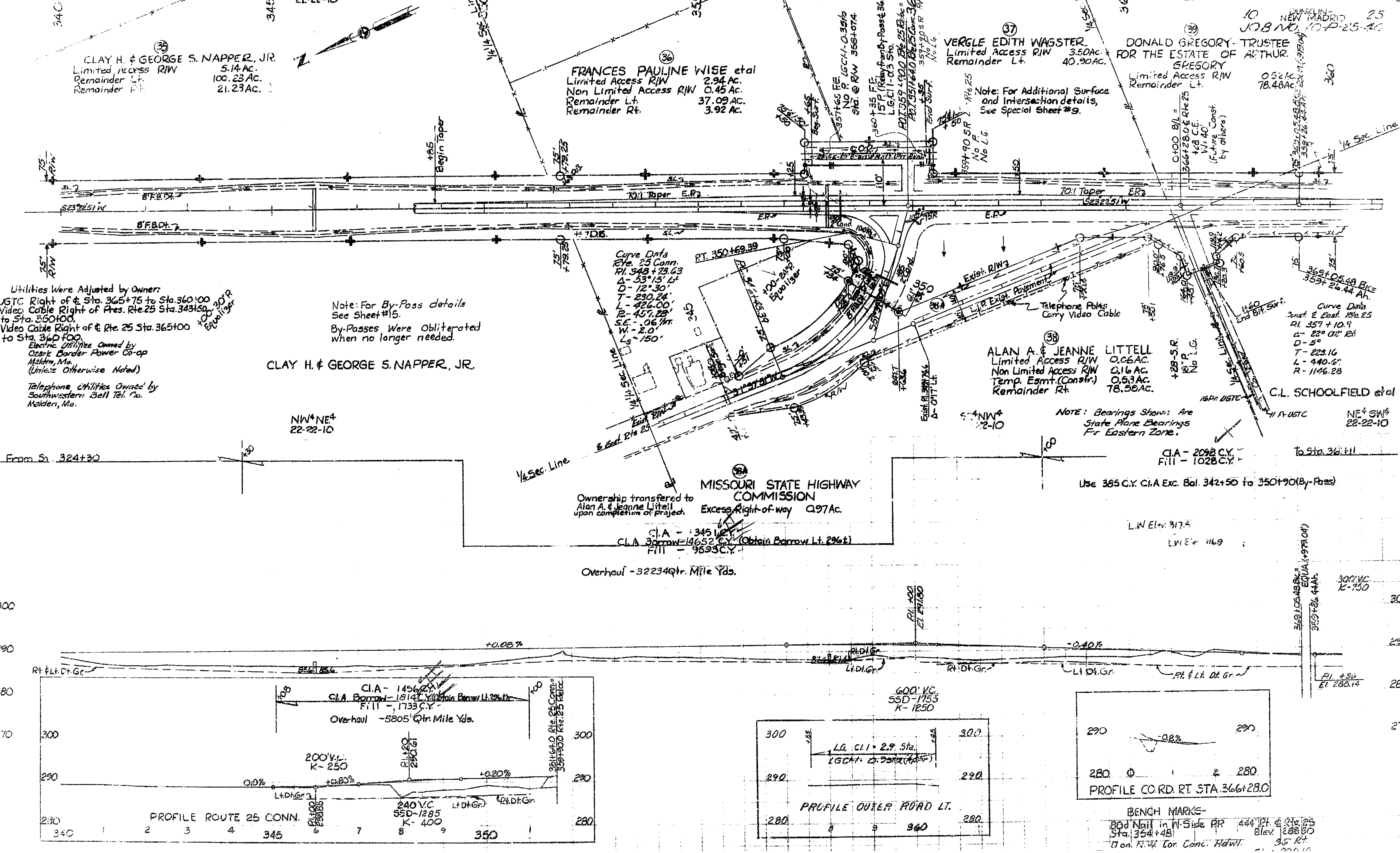
Co. Rd. Sta. 337+49

+0.9%

-0.3%

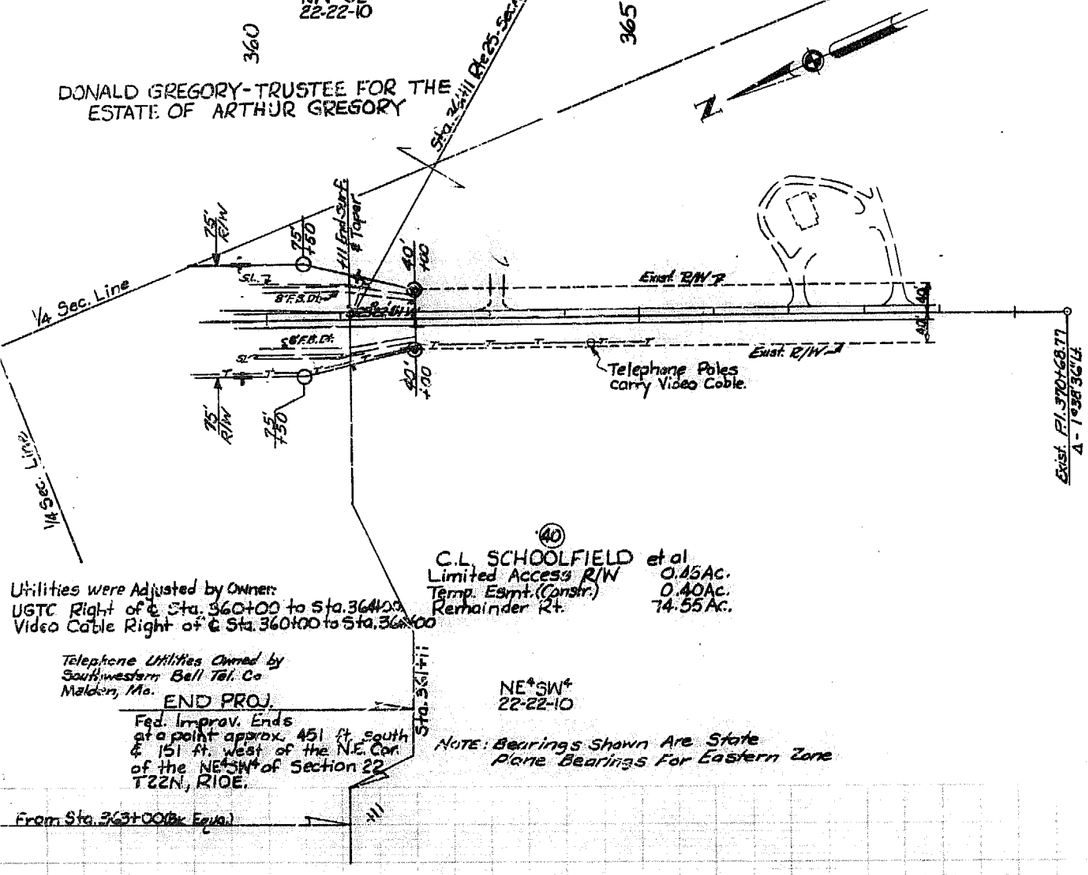
BENCH MARKS

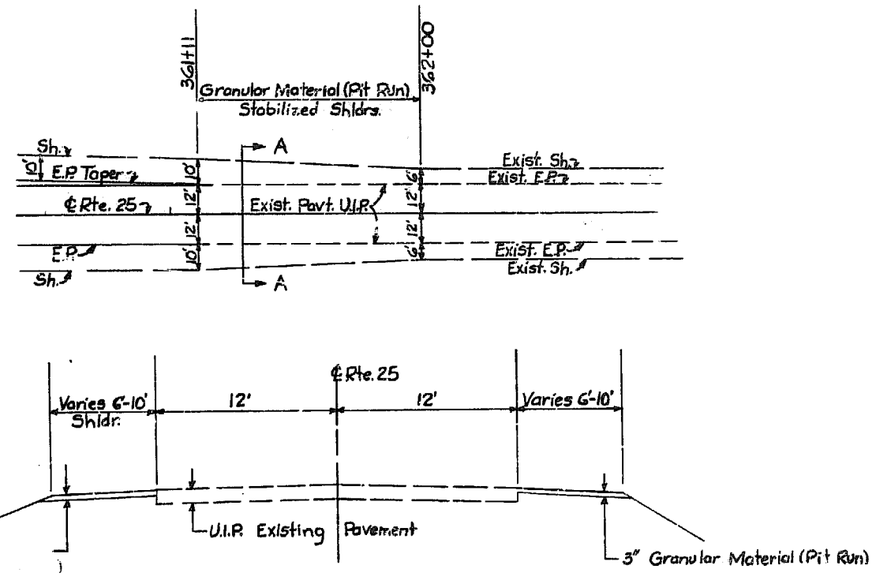
□ on N.W. Cor. Cond. Hdwl. Sta. 314+49		32' Rt. Elev. 286.86
N.I.S.R. 36" Catalpa Sta. 323+73		200' Rt. Elev. 287.85
□ on N.W. Cor. Cond. Hdwl. Sta. 329+99		28' Rt. Elev. 287.78
□ on N.W. Cor. Cond. Hdwl. Sta. 333+99		25' Rt. Elev. 288.90
N.I.E.S. P/P Sta. 337+22		201' Lt. Elev. 289.52



10 DUNKLIN-NEW MADRID 25
JOB NO. 10-P-25-46
CLAY H. & GEORGE S. NAPPER, JR.
Limited Access R/W 5.14 Ac.
Remainder Lt. 100.23 Ac.
Remainder Rt. 21.23 Ac.
FRANCES PAULINE WISE etal
Limited Access R/W 2.94 Ac.
Non Limited Access R/W 0.45 Ac.
Remainder Lt. 37.09 Ac.
Remainder Rt. 3.92 Ac.
VERGLE EDITH WAGSTER
Limited Access R/W 3.50 Ac.
Remainder Lt. 40.90 Ac.
Note: For Additional Surface and Intersection details, See Special Sheet #9.
DONALD GREGORY-TRUSTEE FOR THE ESTATE OF ARTHUR GREGORY
Limited Access R/W
Remainder Lt. 78.48 Ac.
1/4 Sec. Line
Utilities Were Adjusted by Owner:
UGTC Right of ¢ Sta. 365+75 to Sta. 360+00
Video Cable Right of Pres. Rte. 25 Sta. 343+50 to Sta. 350+00.
Video Cable Right of ¢ Rte. 25 Sta. 365+00 to Sta. 360+00.
Electric Utilities Owned by Ozark Border Power Co-op Malden, Mo. (Unless Otherwise Noted)
Telephone Utilities Owned by Southwestern Bell Tel. Co. Malden, Mo.
Note: For By-Pass details See Sheet #15.
By-Passes Were Obliterated when no longer needed.
Curve Data Rte. 25 Conn.
PI. 348+73.63
Δ - 53°15' Lt
D - 12°30'
T - 230.24'
L - 426.00'
R - 457.28'
S.E. - .06 '/Ft.
W. - 2.0'
Ls - 150'
PT. 350+69.39
CLAY H. & GEORGE S. NAPPER, JR.
NW4 NE4 22-22-10
Telephone Poles Carry Video Cable
ALAN A. & JEANNE LITTELL
Limited Access R/W 0.06 Ac.
Non Limited Access R/W 0.16 Ac.
Temp. Esmt. (Constr.) 0.53 Ac.
Remainder Rt. 78.58 Ac.
Curve Data Const. & Exist. Rte. 25
PI. 357+10.9
Δ - 22° 02' Rt.
D - 5°
T - 223.16
L - 440.6'
R - 1146.28
C.L. SCHOOLFIELD etal
NE4 SW4 22-22-10
NOTE: Bearings Shown Are State Plane Bearings For Eastern Zone.
From Sta. 324+30
To Sta. 361+11
Cl.A - 2098 C.Y.
Fill - 1028 C.Y.
Use 385 C.Y. Cl.A Exc. Bal. 342+50 to 350+90 (By-Pass)
MISSOURI STATE HIGHWAY COMMISSION
Excess Right-of-way 0.97 Ac.
Ownership transfered to Alan A. & Jeanne Littell upon completion of project.
Cl.A - 345 C.Y.
Cl.A Borrow - 14652 C.Y. (Obtain Borrow Lt. 296±)
Fill - 9593 C.Y.
Overhaul - 32234 Qtr. Mile Yds.
L.W. Elev. 317.5
300' V.C. K - 750
+0.08%
-0.40%
Rt. & Lt. Dt. Gr.
600' V.C. SSD - 1755 K - 1250
Cl.A - 1456 C.Y.
Cl.A Borrow - 1814 C.Y. (Obtain Borrow Lt. 296±)
Fill - 1733 C.Y.
Overhaul - 5805 Qtr. Mile Yds.
200' V.C. K - 250
240' V.C. SSD - 1285 K - 400
PROFILE ROUTE 25 CONN.
L.G. Cl.1 • 2.9 Sta.
PROFILE OUTER ROAD LT.
PROFILE CO.RD. RT. STA. 366+28.0
BENCH MARKS-
80d Nail in W. Side PP 44' Rt. ¢ Rte. 25 Sta. 354+48 Elev. 288.80

10 DUNKLIN-NEW MADRID 25
JOB NO. 10-P-25-40





NOTE: By-Pass Was Obliterated When No Longer Needed.

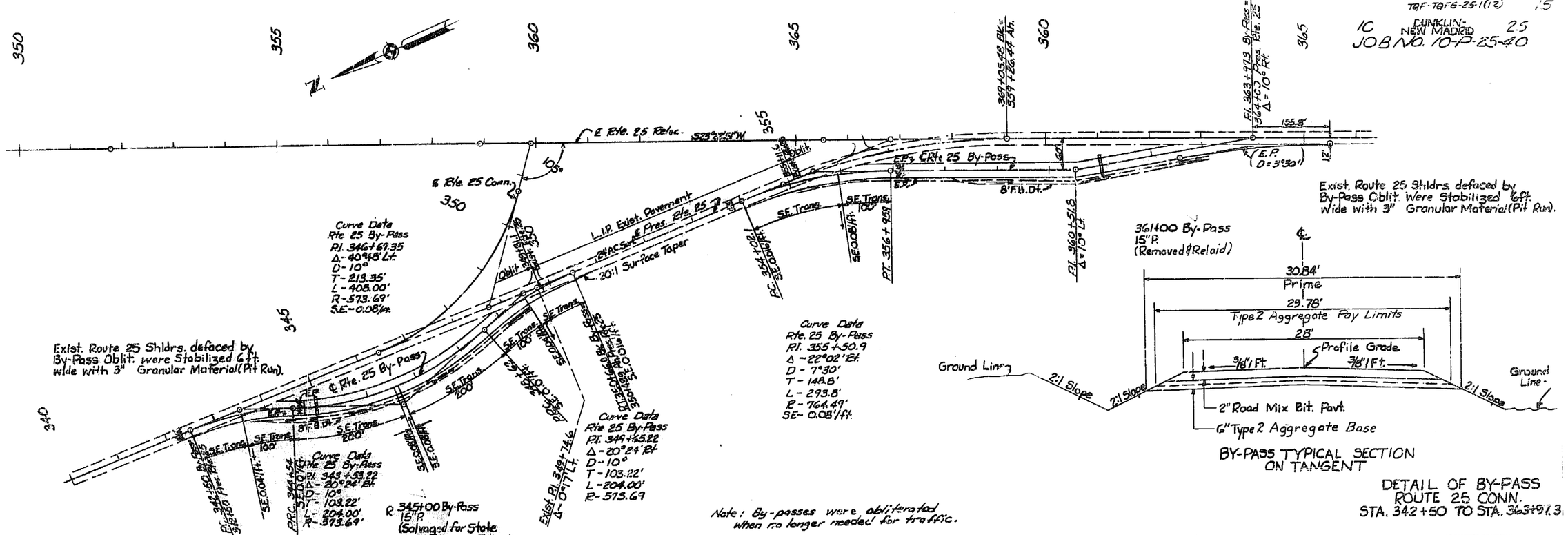
SECTION A-A

300
290
280
270

TAF-TAFS-25-1(12) 15

10 FRANKLIN-NEW MADRID 25

JOB NO. 10-P-25-40



5	MO.	TAF-TAFG-25-1(2)		6
10		DUNKLIN - NEW MADRID	25	

IDB NO. 10-P-25-40

135

140

TYPICAL
Note: Radius Points for Low Profile Curb are dimensioned to edge of Pavement.

P.I. 150+65.61
Δ 45°00' Lt.
D 2°15'
T 105.79'
L 200.00'
R 2546.48'
SE = 0.06'/Ft
W = 0

139+80.0 Exist. Rte. 25
139+34.0 Rte. 25 Conn.

PC 140+10.82

U.I.P. Existing Pavement
Begin. Pav't.

℄ E.P. & Rte. 25
E.P. & Shldr. Line

Begin. Pav't. Widening and Stab. Shldrs. on Rt.

10:300' Taper
4" in 10' Slope
.02 Slope

Type F Low Profile Curb

70°00' Type F Low Profile Curb

PC 140+08.93

Profile Grade

Curb Height Taper 0" to 5" in 5'

S.E. Trans. 150'

PC 141+62.55

Slope .02 Type F Low Profile Curb

Curb Height Taper 0" to 5" in 5'

S.E. Trans. 125'
0.02'/Ft. to 0.08'/Ft.

B/L "A"
P.I. 4+46.78
Δ 36°05'27" Rt.
T 146.61'
L 289.46' (True Arc)
R 450'
SE 0.08/Ft.

PC 3+00.17 B/L A is 22'Rt. Sta. 136+53.38

0+00.0 is 12' Rt. ℄ Rte. 25 Sta. 139+53.28
Δ 1°54'38"

S.E. Trans. 250'

PT 5+83.63

Slope = 0.08'/Ft.

3+00.0 B/L A is 12' Rt. Sta. 141+88.39 Rte. 25 Conn.
PT 2+58.39 B/L A is 12' Rt. P.C.C. 142+13.4 Rte. 25 Conn.

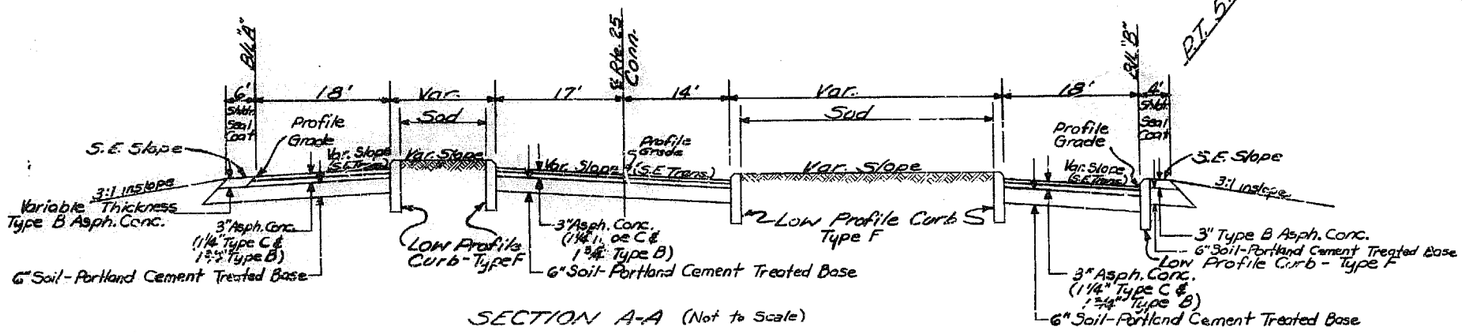
2+69.44 is 12' Rt. 141+20.98 Rte. 25

Rte. 25 Conn.
P.I. 141+17.28
Δ 46°51'43" Lt.
T 108.35'
L 204.47' (True Arc)
R 250'
SE 0.08'/Ft.

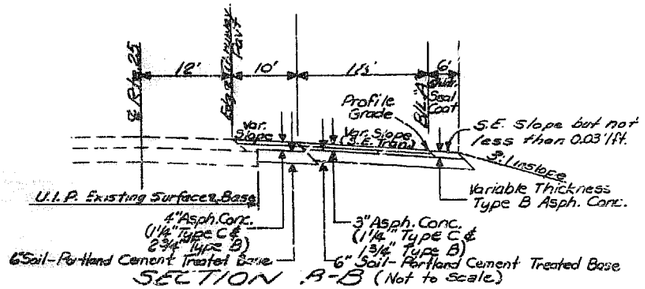
Rte. 23 Conn.
P.I. 144+26.30
Δ 50°38'17" Lt.
T 212.90'
L 397.71' (True Arc)
R 450'
SE 0.03/Ft.

B/L "A"
P.I. 7+27.8'
Δ 14°51'43" Lt.
T 60.26'
L 119.84' (True Arc)
R 462'
SE 0.03/Ft.

Shldr. Line
E.P.
℄ Rte. 25 Conn.
E.P.
Shldr. Line



SECTION A-A (Not to Scale)



SECTION A-B (Not to Scale)

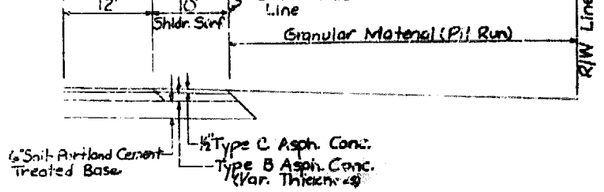
NOTE: See Sheet #6 for Profile Grade of Baseline "A" and Baseline "B".

Graphic Scale:
0 25' 50' 100'

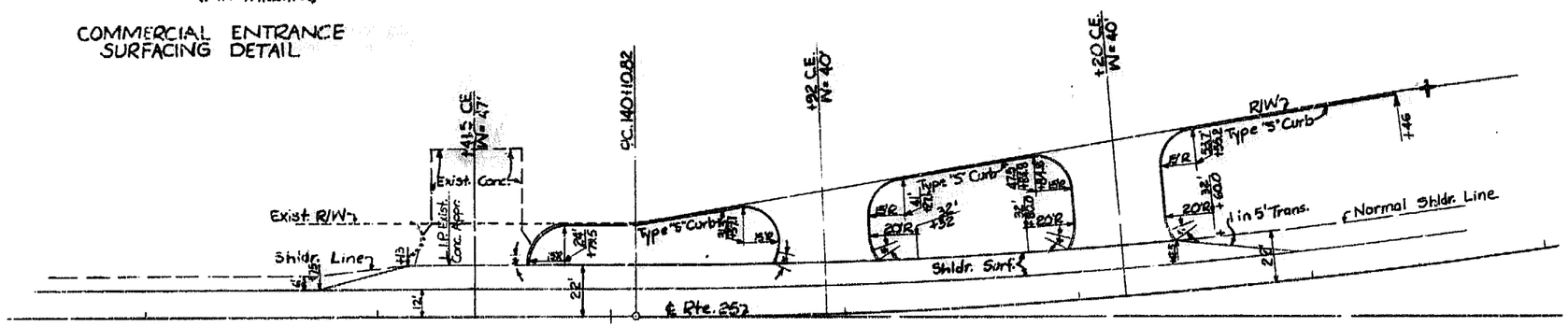
DETAIL OF INTERSECTION
ROUTE 25 & ROUTE 25 CONN.
STA. 139+30

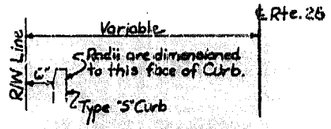
5	MO.	TQF 7QFG-25-1(62)	17
10		DUNKLIN-NEW MADRID	25

JOB NO 10-P 25-40

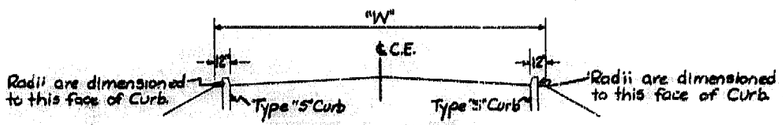


COMMERCIAL ENTRANCE SURFACING DETAIL

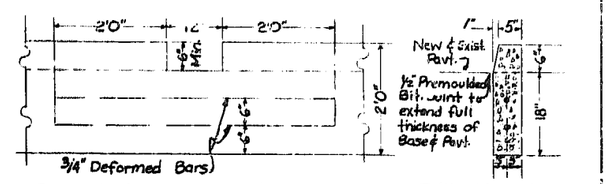




TYPICAL LOCATION OF TYPE S CURB FOR C.E.'S ADJACENT TO R/W



TYPICAL SECTION FOR COMMERCIAL ENTRANCES
(Not to Scale, follow dimensions)



The Cost of this work included in the Cost of Type "S" Curb per lin. ft.

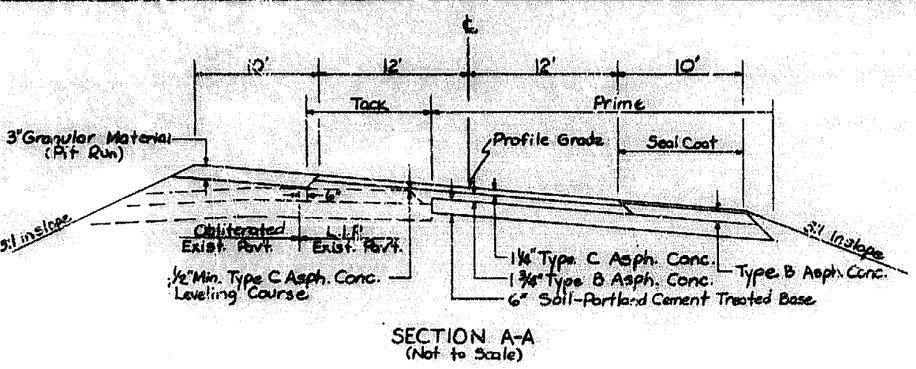
TYPICAL SECTION

Note: Drainage Notches was Constructed in Type "S" Conc. Curb as directed by Engineer.

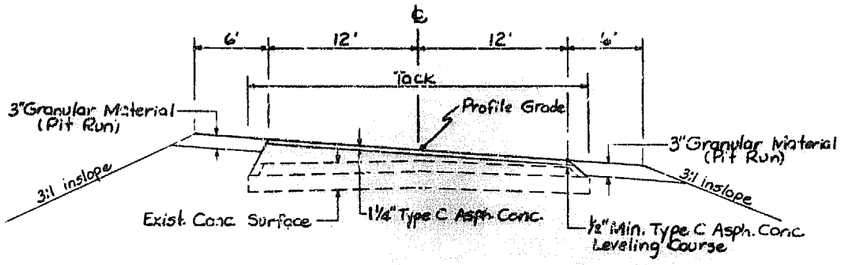
DRAINAGE NOTCH FOR TYPE "S" CONCRETE CURB
(Not to Scale, follow dimensions)

DETAIL OF COMMERCIAL ENTRANCES LT. STA. 139+ TO STA. 142+

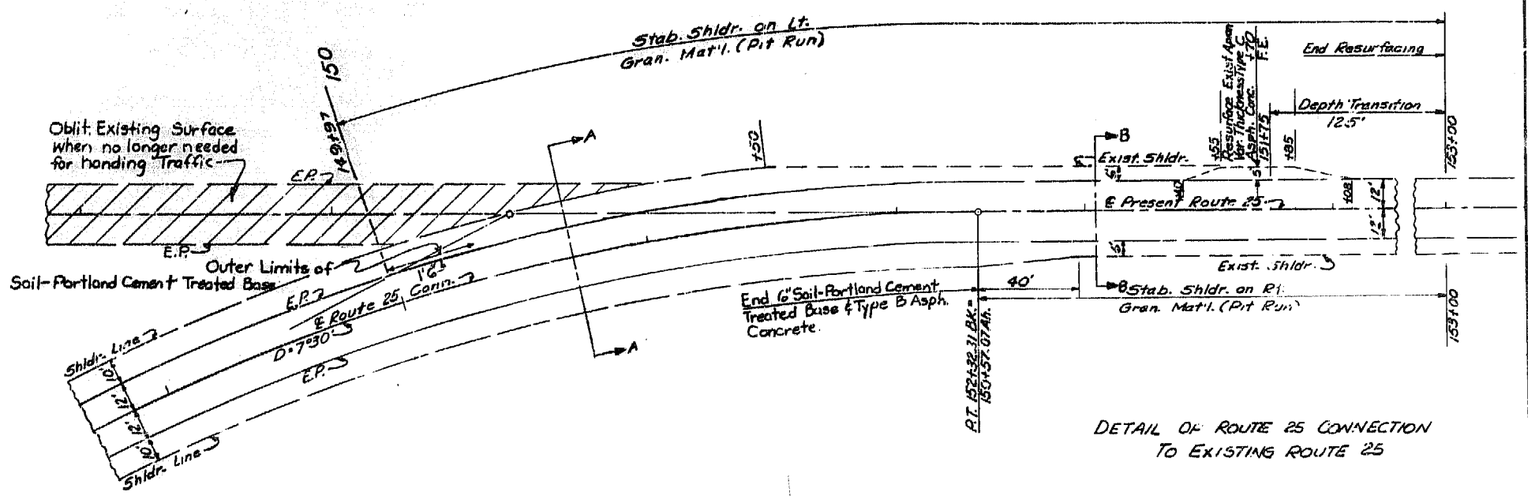
GRAPHIC SCALE
0 25 50 100



SECTION A-A
(Not to Scale)



SECTION B-B

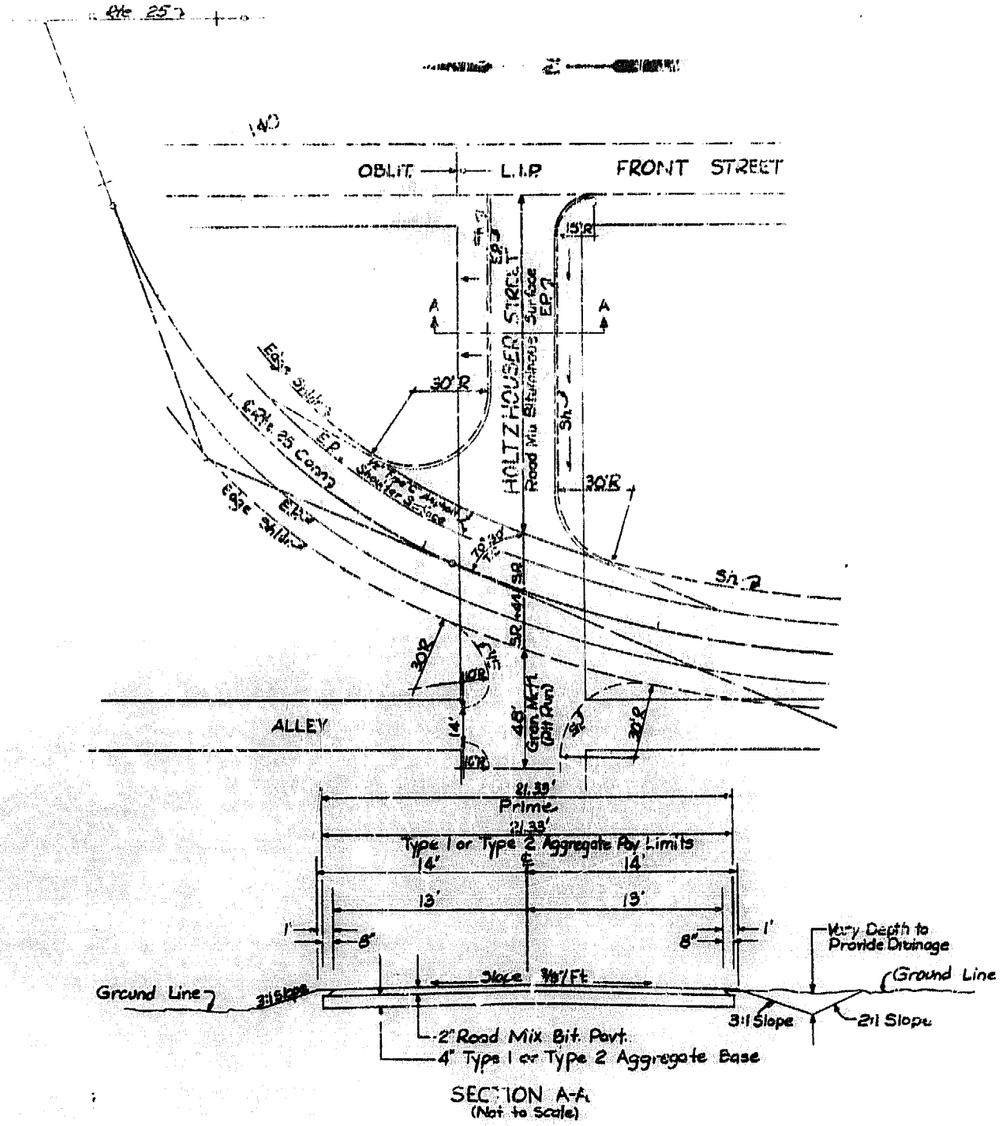


DETAIL OF ROUTE 25 CONNECTION TO EXISTING ROUTE 25

GRAPHIC SCALE

STATE	FEDERAL PROJECT NO.	
MO.	TQF-TQFG-25-1(62)	18
COUNTY		
DUNKLIN-NEW MADRID		25

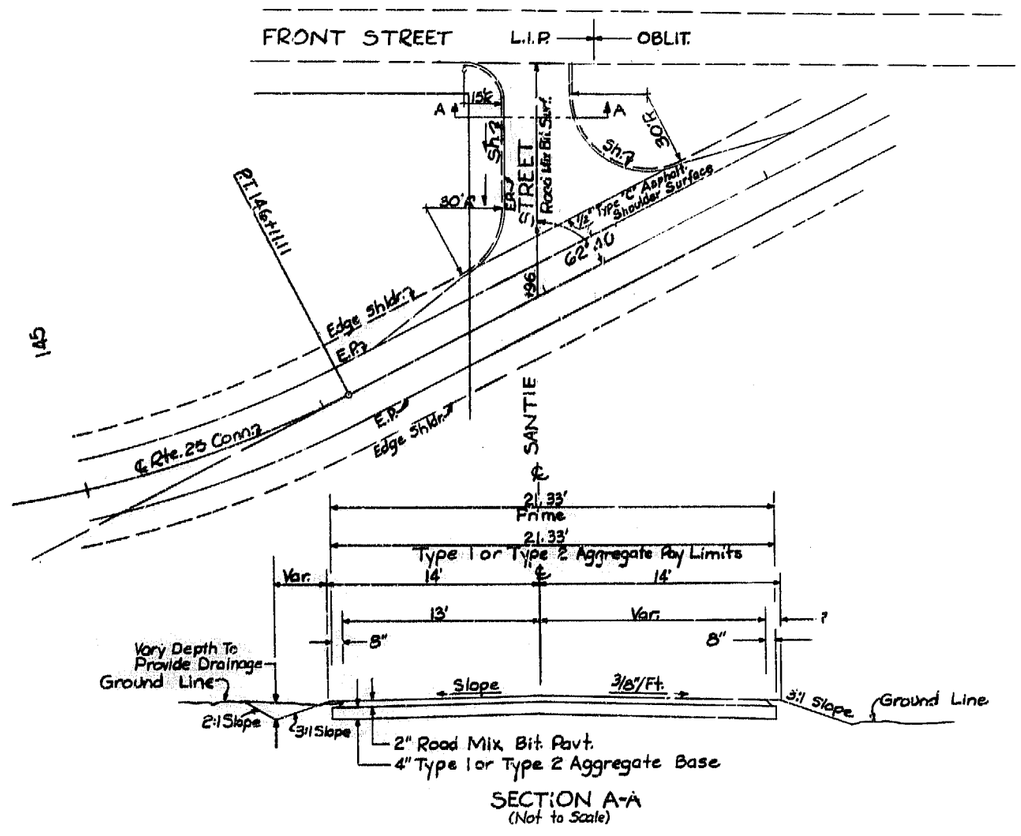
JOB NO. 10-P-25-40



SECTION A-A
(Not to Scale)

Note: Surface on S.R. Rt.-Granular Material (Pit Run)

DETAIL OF SIDE ROADS
RT. & LT. STA. 142+44
RTE. 25 CONN.



SECTION A-A
(Not to Scale)

DETAIL OF SIDE ROAD
LT. STA. 146+96
RTE. 25 CONN.

SCALE

DUNKLIN-
NEW MADRID 25
JOB NO. IC 1225-40

N½ Lot #4 NW¼
2-22-10

S½ Lot #4 NW¼
2-22-10

N½ Lot #4 SW¼
2-22-10

S½ Lot #4 SW¼
2-22-10

Sec. Line

Drainage District Esm't.

Temp. Esm't. (Borrow)

Borrow ℄ "B" N 0° 29' 31" E

W.C. & SARAH DEAN McHANEY

JOHN W. & DESSIE A. MASTERS

NE¼NE¼ 3-22-10

NW¼NE¼ 3-22-10

SW¼NE¼ 3-22-10

SE¼NE¼ 3-22-10

NE¼SE¼ 3-22-10

SE¼SE¼ 3-22-10

¼¼ Sec. Line

℄ Trail

℄ Rte. 25

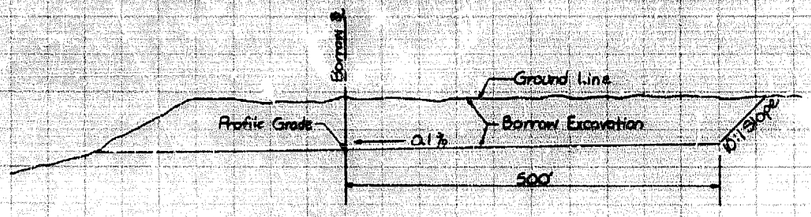
S 58° 16' 14" E

Route 25 Curve Data
P.I. 1994+62.45
Δ = 36° 13' 45" Rt.
D = 2°
T = 937.16'
L = 1811.46'
R = 2864.79'
SE = 0.061 Ft.
W = 0'

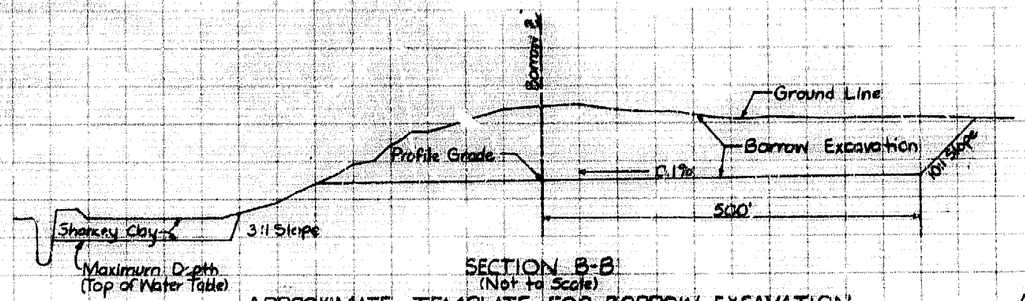
P.T. 2081+36.75

NOTES: Bearings Shown Are State Plane Bearings For Eastern Zone.

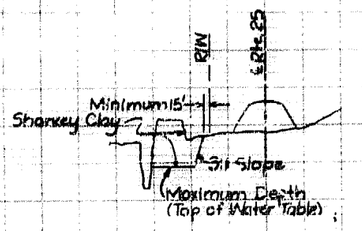
SCA: E
0 1 2 3 4 500' 1000'



SECTION A-A
(Not to Scale)
APPROXIMATE TEMPLATE FOR BORROW EXCAVATION



SECTION B-B
(Not to Scale)
APPROXIMATE TEMPLATE FOR BORROW EXCAVATION



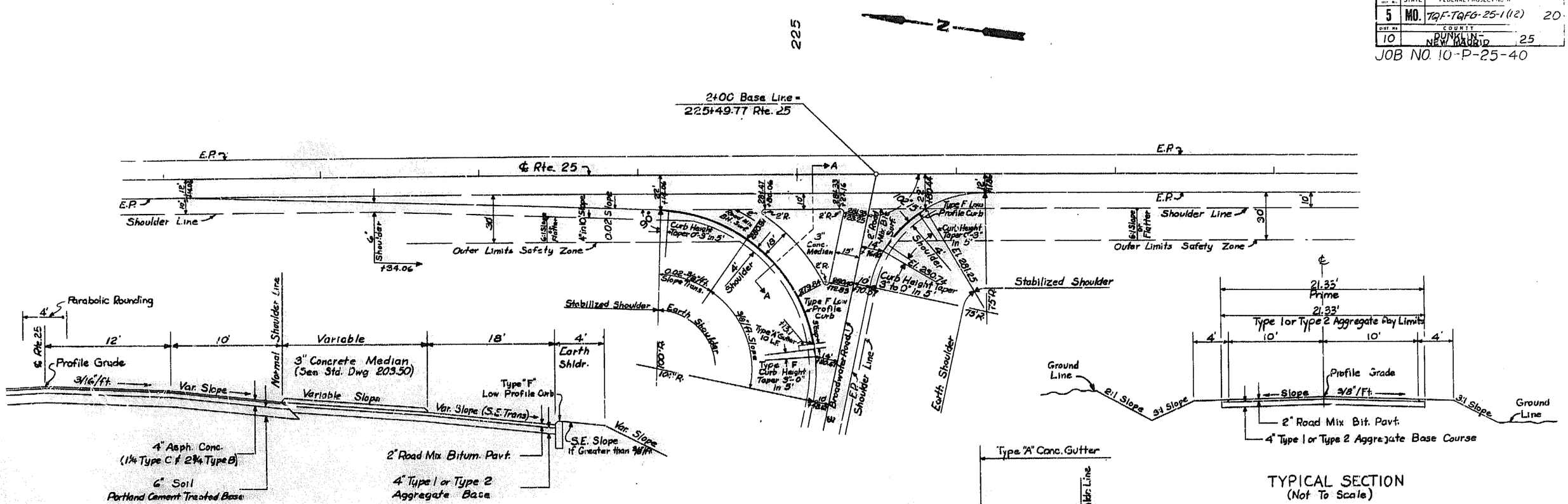
SECTION C-C
(Not to Scale)
APPROXIMATE TEMPLATE FOR BORROW EXCAVATION

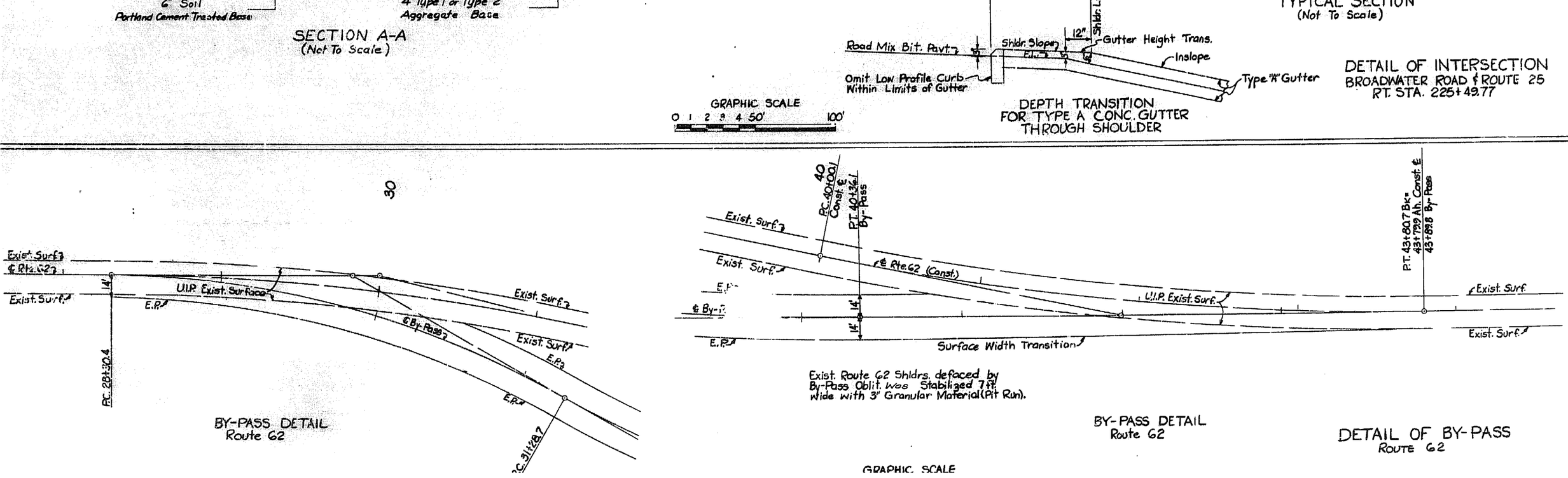
PROFILE GRADE

BORROW BASE LINE LT. P.O.T. 1994+62.45

		FEDERAL PROJECT NO.	
5	MO.	TQF-TQFG-25-1(12)	20
DIST NO.	COUNTY		
10	DUNKLIN-NEW MADRID		25

JOB NO. 10-P-25-40

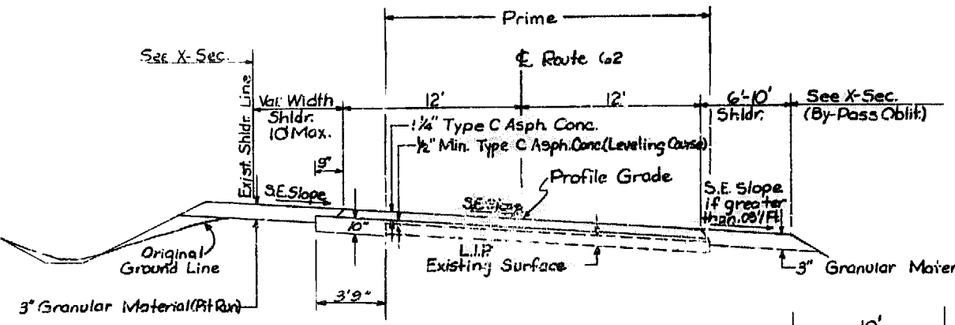




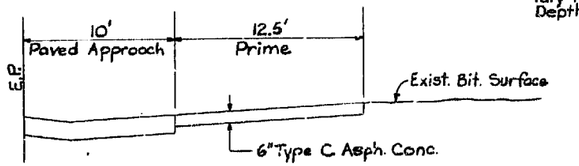
5	MO.	TQF-TQFG-25-1(12)	22
SHT. NO.	COUNTY		
10	DUNKLIN NEW MADRID		25

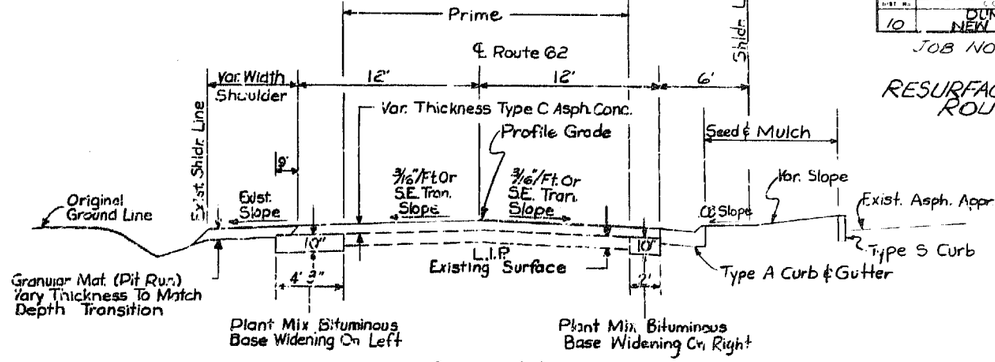
JOB NO. 10-P-25-40

RESURFACING DETAILS ROUTE 62



SECTION D-D
RESURFACING TYPICAL SECTION
Sta. 28+97.6 To Sta. 30+38.9
(Not To Scale)



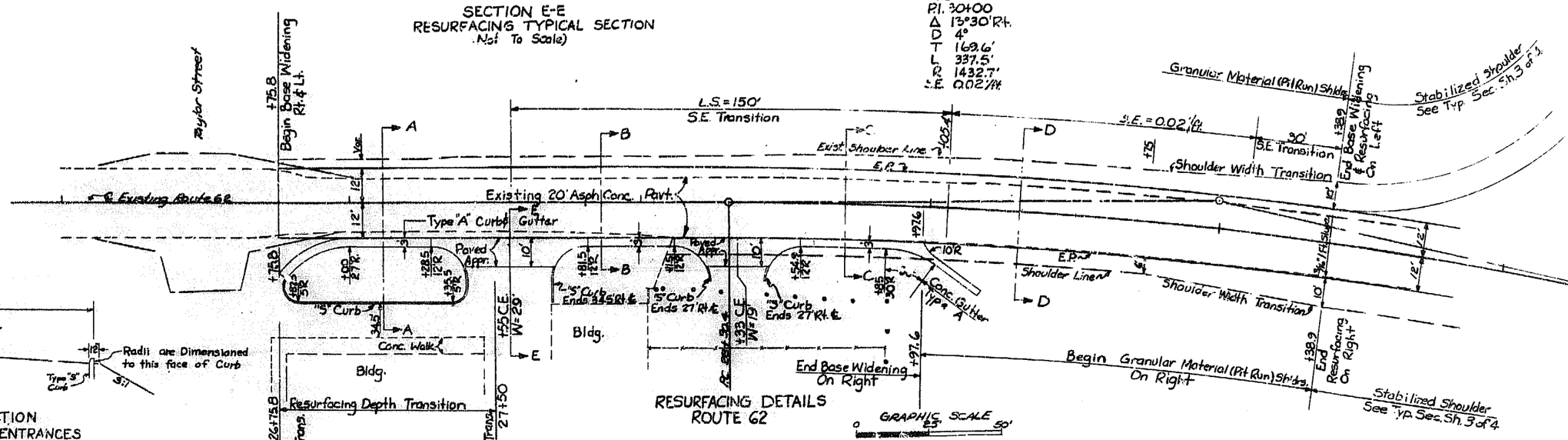


SECTION A-A
RESURFACING TYPICAL SECTION
Sta. 26+75.8 To Sta. 27+50
(Not To Scale)

SECTION E-E
RESURFACING TYPICAL SECTION
(Not To Scale)

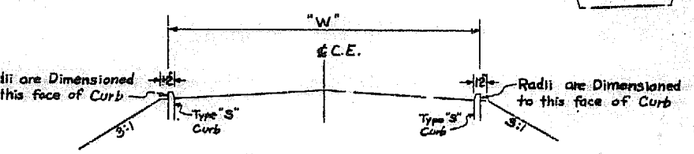
Survey ℄ Construction ℄
Curve Data
Route 62
P.I. 30+00
Δ 13°30' Rt.
D 4°
T 169.6'
L 337.5'
R 1432.7'
S.E. 0.02'/Ft.

30

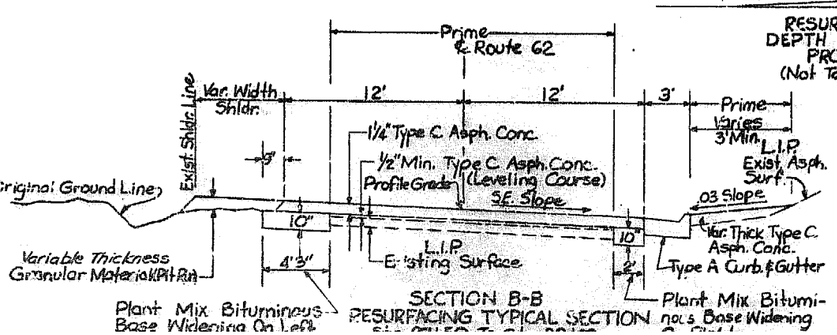


RESURFACING DETAILS
ROUTE 62

GRAPHIC SCALE 25' 0 50'

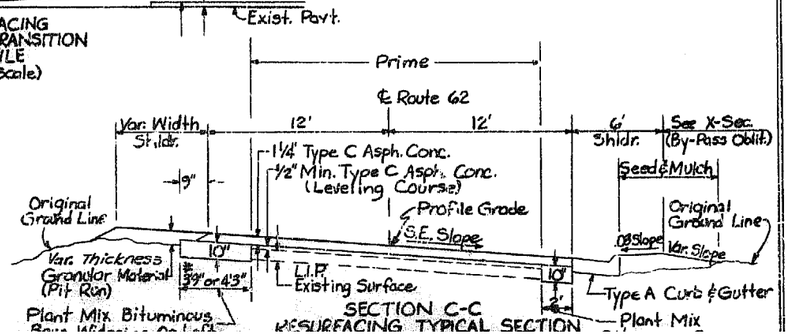


TYPICAL SECTION
FOR COMMERCIAL ENTRANCES
(Not to Scale, follow dimensions)

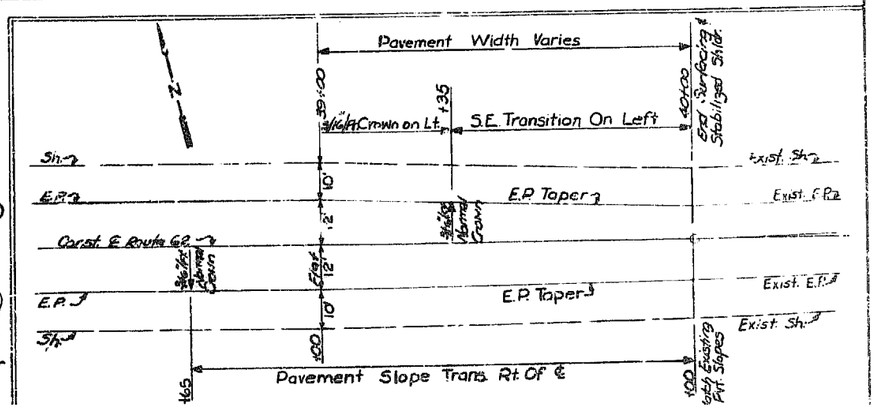


SECTION B-B
RESURFACING TYPICAL SECTION

RESURFACING DEPTH TRANSITION PROFILE
(Not To Scale)



SECTION C-C
RESURFACING TYPICAL SECTION



10 DUNKLIN-NEW MADRID 25
JOB NO. 10-P-25-40
Borrow Area Lt. Sta. 290+

N½ Lot #4 SW4
14-22-10

N½ Lot #4 NW4
14-22-10

BERNADINE H. WERNER et al.

S½ Lot #4 NW4
14-22-10

ROY M. STOKES et al

NOTE: The Design Grade Established For This Borrow Area is Approximate. During The Construction Phase Of The Project, It Was Revised As Necessary To Provide The Proper Amount Of Fill Material To Complete The Roadway Grading.

NEW MADRID COUNTY
DUNKLIN COUNTY

Temp. Esmt. (Borrow)

Borrow B/L

Temp. Esmt. (Borrow)

Temp. Esmt. (Borrow)

℄ Rte. 25

City Limits

Sec. Line

PT. 302+74.47

PC. 288+71.47

RI. 295+90.15
Δ 27°56'24"Rt.
D 2°00'
T 712.68'
L 1397.00'
R 2864.79'
S.E. 0.06'/Ft.
W 0'

S02°42'01"W

330°38'25"W

R.R. R/W

St. Louis-Southwestern R.R.

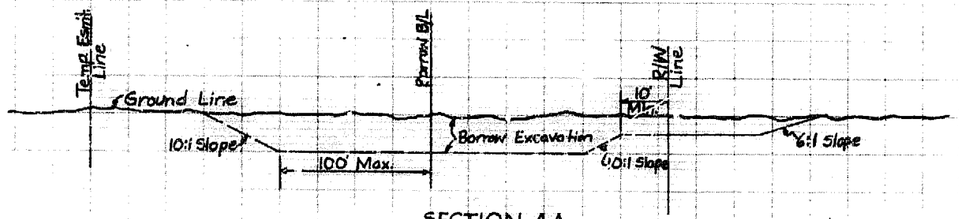
United States of America Utility Esmt.

NE4 SE4
15-22-10

SE4 NE4
15-22-10

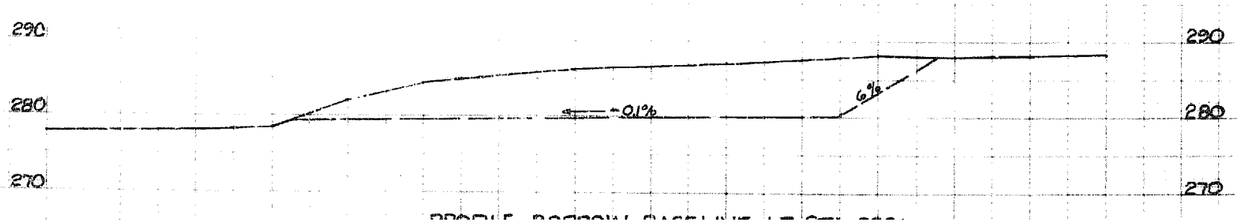
290 295 300 305 310

285



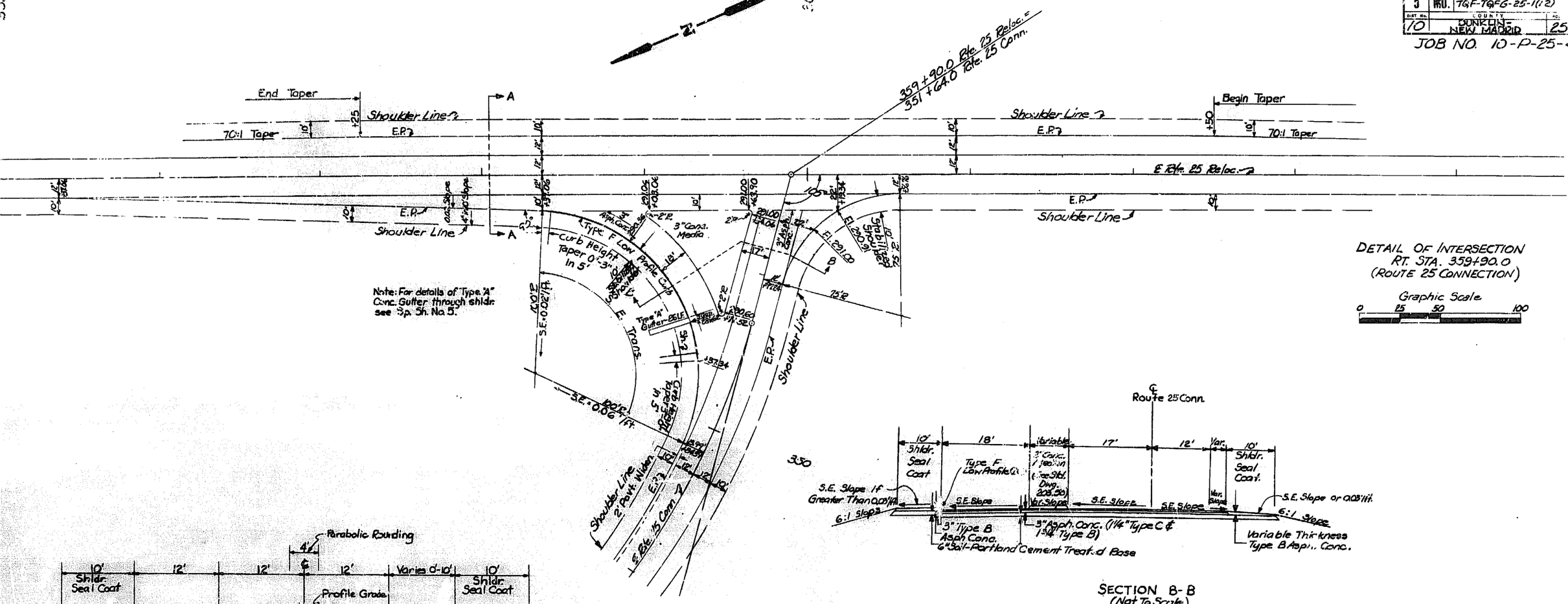
SECTION A-A
(Not to Scale)

APPROXIMATE TEMPLATE FOR BORROW EXCAVATION



3	RU.	76F-76FG-25-1(12)		24
DIST. NO.	COUNTY			NO.
10	DUNKLIN-NEW MADRID			25

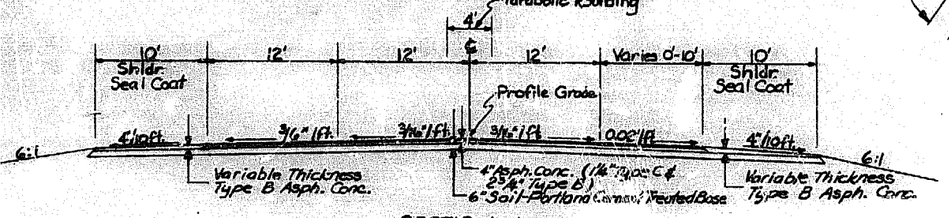
JOB NO. 10-P-25-40



DETAIL OF INTERSECTION
RT. STA. 359+90.0
(ROUTE 25 CONNECTION)

Graphic Scale
0 25 50 100

SECTION B-B
(Not To Scale)



SECTION A-A
TYPICAL SECTION
(Not To Scale)

TQF TGFS-25-1(13) 25

10 DUNKLIN-NEW MADRID 25
JOB NO. 10 P-25-40

LEGEND
Underground Water--New
Relocated Hydrant
Relocated Gate Valve

Note: Underground water line installations has a minimum cover of 42 inches.

.. Note: Water & Sewer facilities owned by City of Malden

137+60, 75' Rt. to 138+13, 30' Rt. Built 8" C.I.P. Water Line

137+62, 76' Rt. Built 8"~22½° Horiz. Bend

138+12 Build 16" RCP (Encasement Conduit) 27' to 61' Rt. See Sp. Sh. #1

138+11.8, 67' Rt. Built 8"~45° Vert. Bend

138+11.9, 63' Rt. Built 8"~45° Vert. Bend

138+12.8, 75' Rt. Built 8"~45° Horiz. Bend

138+11.7, 71' Rt. Built 8"~45° Horiz. Bend

139+300 Exist. Rte. 25 Conn.

P.C. 139+32 Exist. Rte. 25 Conn.

P.C. 140+10.82

140+00, 49' Lt. to 149+25, 107' Lt. Built 6" C.I.P. Water Line

141+00, 49' Lt. Built 6"~11½° Horiz. Bend

141+55, Lt. Built Reloc. Serv. Conn.

143+60, 73' Lt. Built Reloc. Hydrant

143+60, 67' Lt. Build 6"x6"x6" Tee.

144+51, Lt. Built Reloc. Serv. Conn.

145+19, Lt. Built Reloc. Serv. Conn.

145+70 Lt. Built Reloc. Serv. Conn.

146+00, 70' Lt. Built 6"~11½° Horiz. Bend

148+15, Lt. Built Reloc. Serv. Conn.

149+20, 112' Lt. Built Reloc. Hydrant

149+20, 108' Lt. Built Reloc. Gate Valve

149+25, 107' Lt. End 6" C.I.P. Water Line. Plug. Stub End

149+20, 106' Lt. Built 6"x6"x6" Tee

Begin New 6" C.I.P. Water Line (Connect to Exist 6" Water Line)

Type S Curb

Exist. R/W

6" C.I.P. Water Main

14" Gas Main

2" Gas Main

4" Steel Gas Main

Ø Rte. 25 Reloc.

Ø Rte. 25 Conn.

E.P.

R/W

C.E.

P.E.

Math Line

U.I.P. 4" Encasement for 8" Water Main

New 8" C.I.P. Water Line

FRONT STREET

BAKER STREET

HOPWOOD STREET

SANTEE STREET

ALLEY

P.C. 140+06.93

P.C. 142+13.40

P.T. 144+11.11

P.C. 145+65.64

143+20, Rte. 25 Conn. Adjust House Sewer Conn. From 30' Lt. to 30' Rt. of ℄ Rte. 25 Conn., adjusted Sewer Pipe has 30" minimum cover.

145+30, Rte. 25 Conn. Adjust House Sewer Conn. From 30' Lt. to 35' Rt. of ℄ Rte. 25 Conn. adjusted sewer pipe has a 36" minimum cover.

143+42, Rte. 25 Conn. Built Reloc. Serv. Conn.

145+57, Rte. 25 Conn. Built Reloc. Serv. Conn.

142+76, 47' Rt. Built Reloc. Hydrant

Plugged at R/W Line

Plugged at R/W

SIZE PIPE	FITTING	DIMENSION A	DIMENSION B
8"	TEE	2.0'	1.5'
	45°	2.0'	1.5'
	22 ½°	2.0'	1.0'
6"	TEE	2.0'	1.0'
	45°	2.0'	1.0'
	22 ½°	2.0'	1.0'

DETAILS OF REACTION BACKING

SCALE : 25' 50' 100'

WATER & SAN. SEWER ADJUST.
STA. 137 TO STA. 150
SPECIAL SHEET NO. 10

EXISTING UTILITIES
PROFILE ROUTE 25 RELOC.

+3.05%

+3.0%

Approx. X-ing 8" Water Main Encased 118+El. 288.0

Approx. X-ing 2" Gas Main 144+El. 289.6

Approx. X-ing 1500 P.I. U.G.T.E. 140+El. 290.9

Approx. X-ing 6" Water Main 138+El. 290.6

Approx. X-ing 3/4" Water Line 193+El. 290.0

290

280

137 138 139 140 141 142 143 144 145 146 147 148 149

EXISTING UTILITIES
PROFILE ROUTE 25 CONN.

-1.00%

+0.50%

+0.30%

+2.10%

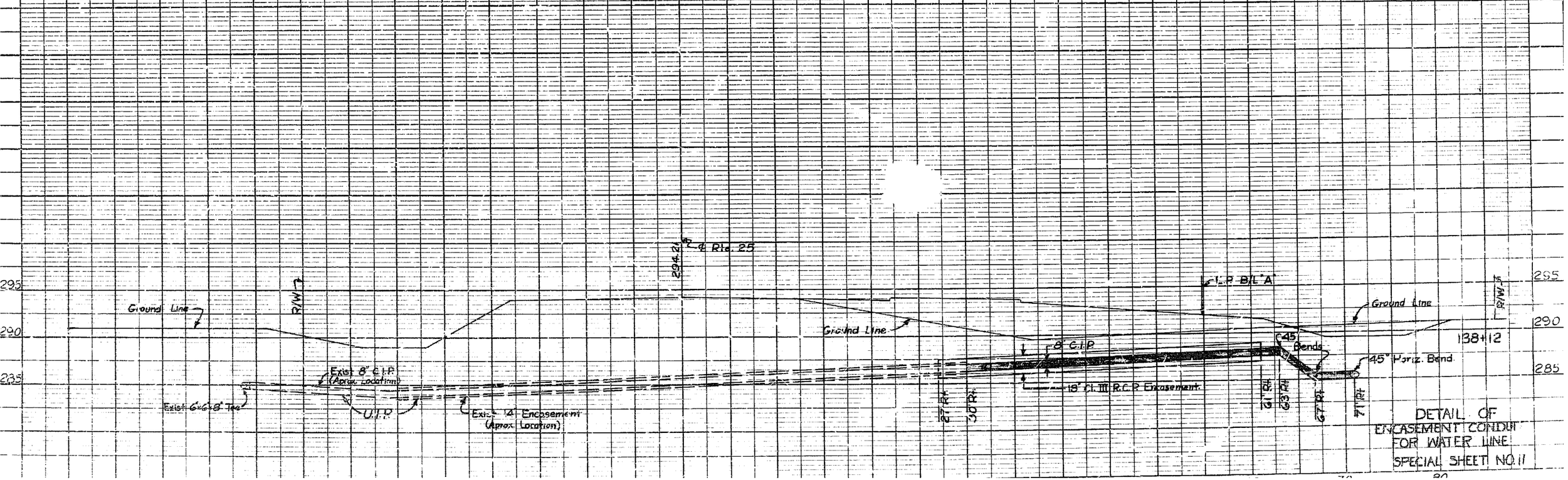
Approx. X-ing

290

MISSOURI TAF-TAFE-25-1(12) 2.6

DIST. NO. 10 | COUNTY DUNKLIN-NEW MADRID 25

JOB NO. 10-P-25-40



DETAIL OF
ENCASEMENT CONDUIT
FOR WATER LINE
SPECIAL SHEET NO. 11

10 DUNKLIN-NEW MADRID 25
40 JOB NO. 10-P-25-40

Right-of-Way Curve Data
Exist. Rte. 62
P.C. 394+04.6
P.I. 411+91.0
P.T. 441+75.4
Δ - 11°25'Lt
D - 2°
T - 286.4'
L - 570.8'
R - 2864.9'

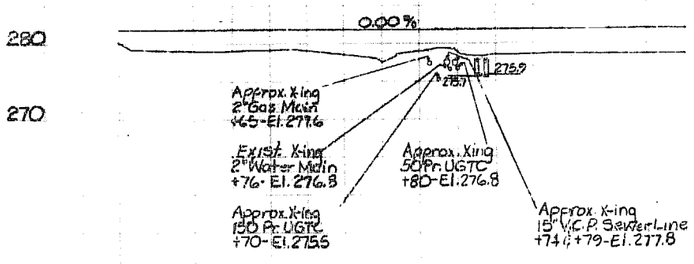
Curve Data
Exist. Rte. 62
P.I. - 30+00
Δ - 13°30'Rt
D - 4°
T - 169.6'
L - 337.5'
R - 1432.7'

Sta. 279+90 - Built 24" Encasement Conduit (Class III RCP)
Sta. 279+95 - Built 24" Encasement Conduit (Class III RCP)
(Encasement for Future Sanitary Sewer Installation)

Sta. 279+74 & Sta. 279+79 Exist. 15" V.C.P. Sanitary Sewer Crossings. Do not Disturb & U.I.P.

Sta. 279+83 - 70' Lt. to 70' Rt.
Replaced Exist. 2" Water Main With 2" Copper Water Tube. Minimum Cover 42".

SCALE
0 25 50 100



PROFILE ROUTE 25

SP-2
JAN. 1977

MISSOURI STATE HIGHWAY COMMISSION
STANDARD PLANS

FINAL PLANS

FED. ROAD DIVISION		PROJECT	SHEET NO
5	MO.	TQF-TQFG-25-1(12)	62
DIST NO		COUNTY	ROUTE
10		Dunklin-New Madrid	25

✓	NO.	DESCRIPTION
	202.00D	EXCAVATION & EMBANKMENT
✓	203.02B	UNDERGRADING
	203.10	TABULATED EARTHWORK & SECTION DATA
✓	203.20	SUPERELEVATION SPIRALS & WIDENING (UNDIVIDED)
	203.21	SUPERELEVATION SPIRALS & WIDENING (DIVIDED)
✓	203.30A	ENTRANCES & APPROACHES (LESS THAN 400 ADT)
	203.31B	ENTRANCES & APPROACHES (GREATER THAN 400 ADT - NO SAFETY ZONE)
✓	203.32C	ENTRANCES & APPROACHES (GREATER THAN 400 ADT - SAFETY ZONE)
	203.35	MAILBOX TURNOUTS
	203.40D	TYPICAL DETAILS-RAMPS FOR INTERCHANGES (NO SAFETY ZONE)
	203.41D	TYPICAL DETAILS-RAMPS FOR INTERCHANGES (SAFETY ZONE)
✓	203.50H	TYPICAL CROSS-OVERS (DIVIDED HIGHWAYS)
	204.00A	EMBANKMENT CONTROL MEASURING DEVICES
	502.00E	CONCRETE PAVEMENT APPURTENANCES
	502.10R	DOWEL SUPPORTING UNITS
	502.20	CONCRETE APPROACH SLABS TO RAILROAD CROSSINGS
	503.00D	CONCRETE APPROACH SLABS TO BRIDGES
✓	602.00A	RIGHT-OF-WAY & DRAIN MARKERS
✓	604.05	PIPE CULVERT HEADWALLS - TYPE S
	604.10A	HEADWALL-WITH ENERGY DISSIPATOR - 18"
	604.11A	HEADWALL-WITH ENERGY DISSIPATOR - 24"
	604.12A	HEADWALL-WITH ENERGY DISSIPATOR - 30"
	604.13A	HEADWALL-WITH ENERGY DISSIPATOR - 36"
	604.14A	HEADWALL-WITH ENERGY DISSIPATOR - 42"
	604.15A	HEADWALL-WITH ENERGY DISSIPATOR - 48"
	604.20A	DROP INLET TYPE B
	604.21	DROP INLET TYPE C
	604.22	DROP INLET - TYPE D
	604.23	DROP INLET - TYPE E
	604.24	DROP INLET - TYPE EE
	604.25	DROP INLET - TYPE F
	604.26A	DROP INLET - TYPE G
	604.27	DROP INLET - TYPE S (3 SHEETS)
	604.28B	DROP INLET - TYPE T (ALSO INCLUDE 614.30)
	604.29A	DROP INLET - TYPE X
	604.30A	CONCRETE MANHOLES (ALSO INCLUDE 614.30)
	604.40C	PIPE COLLARS
	605.10A	CLASS A UNDERDRAINS
✓	606.00H	GUARD RAIL (2 SHEETS)
✓	606.20C	BRIDGE ANCHOR SECTION (BRUSH CURB)(ALSO INCLUDE 606.00)
	606.21B	BRIDGE ANCHOR SECTION - CURB TYPE (ALSO INCLUDE 606.00)
	606.22A	BRIDGE ANCHOR SECTION (SAFETY BARRIER CURB)(INCLUDE 606.00)
✓	606.30B	TERMINAL SECTION (ALSO INCLUDE 606.00)
	606.40A	GUARD CABLE
	606.50	GUARD FENCE
	607.10M	CHAIN LINK FENCE
	607.11A	CHAIN LINK FENCE FOR RETAINING WALLS
	607.20C	WOVEN WIRE FENCE (ALSO INCLUDE 607.10)

✓	NO.	DESCRIPTION
✓	608.00A	PAVED APPROACHES
	608.10D	CONCRETE SIDEWALK
	608.20	CONCRETE STEPS
✓	609.00F	CONCRETE CURB - CURB & GUTTER - GUTTER
	609.15	PAVED DITCHES
✓	609.40D	DRAIN BASIN, SHLDR. PAVING & FILL SLOPE AT BR. ENDS
	609.60	DITCH LINER
	609.70A	ROCK LINING FOR CULVERT OUTLETS
	610.20A	BRICK MANHOLES (ALSO INCLUDE 614.30)
✓	611.60D	CONCRETE SLOPE PROTECTION
✓	612.10E	BARRICADES AND FLASHER SIGNS
✓	612.20M	STANDARD CONSTRUCTION SIGNS (5 SHEETS) (ALSO INCLUDE 903.00)
✓	614.10F	CURB INLETS, GRATES & BEARING PLATES
	614.30B	MANHOLE FRAMES & COVERS
	615.00	OFFICE FOR ENGINEER
	617.00K	CONCRETE MEDIAN BARRIER - (3 SHEETS)
✓	702.01B	16" CONCRETE PILES (APPROVED TYPES) (2 SHEETS)
✓	702.02	CAST-IN-PLACE CONCRETE PILES (APPROVED TYPES)
	703.16B	CONCRETE BOX CULVERTS, H15 LOADING (3 SHEETS)
	703.16	CONCRETE BOX CULVERTS, H15 LOADING (3 SHEETS) (FLARED WINGS)
	703.20B	CONCRETE BOX CULVERTS, HS20 LOADING (3 SHEETS)
	703.21	CONCRETE BOX CULVERTS, HS20 LOADING (3 SHEETS) (FLARED WINGS)
	703.24A	CONCRETE BOX CULVERTS, SKEW DATA (703.16, 703.20, 703.30)
	703.25	CONCRETE BOX CULVERTS SKEW DATA (703.16 & 703.21) (FLARED WINGS)
✓	703.30A	CONCRETE BOX CULVERTS, 4' SPANS & LESS - ALL LOADING
	703.35A	CONCRETE BOX CULVERTS, CUTTING DETAILS (STRAIGHT WINGS)
	703.36	CONCRETE BOX CULVERTS, CUTTING DETAILS (FLARED WINGS)
	703.50C	CONCRETE DOUBLE BOX STRUCTURE - SQUARE
✓	703.51B	CONCRETE DOUBLE BOX STRUCTURE - SKEWED
	703.52A	CONCRETE DOUBLE BOX STRUCTURE - CUT SECTIONS
	703.53A	DOUBLE BOX STRUCTURE TOP SLAB REINF. H15 LOADING (5 SHEETS)
✓	703.54A	DOUBLE BOX STRUCTURE TOP SLAB REINF. H20 OR HS20 LOADING (5 SHEETS)
✓	703.60A	CONCRETE BOX STRUCTURE - PIPE INLET
✓	706.30B	REINFORCING BAR SUPPORTS
	706.35A	BAR SUPPORTS FOR CONCRETE REINFORCEMENT
	712.40	STEEL DAMS FOR BRIDGES (6" CHANNEL)
	712.41	STEEL DAMS FOR BRIDGES (4" CHANNEL)
	712.42	FILLET WELDED TEE JOINT TEST
	717.11A	TIMBER BRIDGES - 11' ROADWAY
	717.15A	TIMBER BRIDGES - 15' ROADWAY
	717.19A	TIMBER BRIDGES - 19' ROADWAY
	725.31	METAL CURTAIN WALL AND METAL INLETS
✓	726.30A	CULVERT INSTALLATION METHODS
	731.00H	PRECAST MANHOLES (ALSO INCLUDE 614.30)
✓	732.00D	FLARED END SECTION (2 SHEETS)
	733.00J	PRECAST DROP INLETS (4 SHEETS) (ALSO INCLUDE 614.30 & 614.10)
	806.00A	EROSION CONTROL NETTING (INSTALLATION) TYPE I & TYPE II
✓	806.02	STAPLE PLACEMENT FOR TYPE II NETTING
	807.00	GLASS FIBER MAT (INSTALLATION)

✓	NO.	DESCRIPTION
		HIGHWAY LIGHTING
	901.00D	POLES & APPURTENANCES - 30' (2 SHEETS)
	901.01	POLES & APPURTENANCES - 45' (2 SHEETS)
	901.05A	CONTROL PANEL CABINET DETAILS (2 SHEETS) (NOTE BELOW)
	901.12A	POLE MOUNT. CONT. STA.-SECONDARY SERV.-480 V MULTI. CIR. (NOT METERED)
	901.15A	POLE MOUNT. CONT. STA.-SEC. SERV.-120, 240, & 480 V MULTI. CIR.
	901.16A	POLE MOUNT. CONT. STA.-SEC. SERV.-480 V MULTI. CIR. (METERED)
	901.18B	POLE MOUNT. CONT. STA.-SEC. SERV.-120/240 V MULTI. CIR.
	901.19A	POLE MOUNT. CONT. STA.-SEC. SERV.-240 V MULTI. CIR. (NOT METERED)
	901.20A	POLE MOUNT. CONT. STA.-SEC. SERV.-120/240 V MULTI. CIR. (SIG. METERED)
	901.22A	POLE MOUNT. CONT. STA.-SEC. SERV.-120/240 & 480 V MULTI. CIR. (BOTH METERED)
	901.23A	POLE MOUNT. CONT. STA.-SEC. SERV.-240 V MULTI. CIR. (METERED)
	901.24A	POLE MOUNT. CONT. STA.-SEC. SERV.-240 V MULTI. CIR. (LTS & SIGS-BOTH METERED)
	901.25	BASE MOUNT. CONT. STA.-SEC. SERV.120-240 V MULTI. CIR.
	NOTE:	DRAWING 901.05 INCLUDED WITH DRAWINGS 901.12 THROUGH 901.25 EXCEPT 901.18
		TRAFFIC SIGNALS
	902.00A	SIGNAL HEADS, LENSES AND MOUNTING
	902.10A	PULL BOXES, CONTROLLERS, COND. INSTAL., POWER SUPPLY
	902.30A	CONCRETE BASES
	902.40A	TUBULAR STEEL POST
	902.50A	DETECTORS
	902.60A	SPAN WIRE DETAILS
		HIGHWAY SIGNING
✓	903.00A	STANDARD ALPHABETS (SILK SCREEN - 5 SHEETS)
	903.01	ALPHABETS (CUT OUT - 5 SHEETS)
	903.02J	HIGHWAY SIGNING (7 SHEETS)
	903.03Q	SIGN MOUNTING DETAILS (7 SHEETS)
	903.04	WEIGH STATION SIGNING
	903.05A	TUBULAR SPAN SUPPORT - ONE TUBE, TYPE S
	903.06A	TUBULAR SPAN SUPPORT - TWO TUBE, TYPE S
	903.07A	TUBULAR CANTILEVER SUPPORTS TYPE C
	903.08B	TUBULAR BUTTERFLY SUPPORTS, TYPE B
	903.09C	LIGHTING SUPPORT BRACKET
	903.10H	SIGN TRUSSES - OVERHEAD ALUMINUM (8 SHEETS)
	903.12E	SIGN TRUSSES - BUTTERFLY & CANTILEVER - STEEL (7 SHEETS)
	903.60G	SIGN TRUSSES - OVERHEAD STEEL (7 SHEETS)

NOTES: Plans for this project were developed using Drawings from this index. Plans issued for this project contain the Drawings checked. If any Drawing(s) is missing, it will be furnished upon notification and its omission will not be cause for claim on this project.