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ADVERTISEMENT FOR BID
450 EAST WIDENING PROJECT
PHASE 2

North Ogden City Corporation

RECEIPT OF BIDS: Sealed bids will be accepted at the Office of the City Recorder North Ogden City, 505 E 2600 N, North Ogden City, Utah, 84414, until 2:00 p.m. on December 17th, for the 450 East Widening Project for North Ogden City Corporation.

DESCRIPTION OF WORK: The work consists of demolition of existing facilities, roadway excavation and widening, utility relocations, curb, gutter and sidewalk installations, and a new traffic signal.

LOCATION OF WORK: The work is located on 450 East from as shown in the plan drawings.

COMPLETION OF WORK: All work specified in the contract documents shall be substantially completed within 60 days from the date specified in the Notice to Proceed. The date of substantial completion shall be no later than DATE.

OPENING OF BIDS: Bids will be publicly opened at 2:00 p.m. on December 17th, at the aforementioned office of the City Recorder North Ogden City.

OBTAINING CONTRACT DOCUMENTS: Contract Documents may be obtained at North Ogden City's website. Bid documents will be available online at <https://www.northogdencity.com/>

BID SECURITY: Each bid shall be accompanied by a certified check, cashier's check or bid bond in the amount of five percent of the total bid price, made payable to North Ogden City Corporation as guarantee that the bidder, if his bid is accepted, will promptly execute the Contract, secure payment of Worker's Compensation insurance and furnish a satisfactory, faithful performance bond in the amount of one hundred percent of the contract price and a payment bond in the amount of one hundred percent of the contract price.

PROJECT ADMINISTRATION: All questions relative to this project prior to opening of bids shall be directed to the Engineer. No specification interpretations will be made by telephone, nor will any "or equal" products be considered for approval prior to award of contract.

OWNER'S RIGHTS RESERVED: North Ogden City Corporation reserves the right to reject any or all bids, to waive any informalities in a bid, and to make awards in the interest of the City. If North Ogden City awards the contract for the Work, such award shall be to the responsible Bidder based on the "Choosing by Advantages" (CBA) decision making evaluation.

Dated: November 18th, 2025

Published: November 18th, 2025

By:

North Ogden City Engineer
Eric Casperson

SECTION 00 21 13

INSTRUCTIONS TO BIDDERS

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ARTICLE 1 – DEFINED TERMS

- 1.01 Terms used in these Instructions to Bidders have the meanings indicated in the General Conditions and Supplementary Conditions. Additional terms used in these Instructions to Bidders have the meanings indicated below:
- A. Bidder. One who submits a Bid for Work directly to the Owner, distinct from a sub-bidder who submits a bid to a Bidder.
 - B. Successful Bidder. If Owner awards the contract for the Work, such award shall be to the responsible Bidder based on the “Choosing by Advantages” (CBA) decision making evaluation.
 - C. Bidding Documents. Documents include the Invitation to Bid, Instructions to Bidders, Bid Form, and the proposed Contract Documents (including all Addenda issued prior to receipt of Bids).
 - D. OWNER. The Owner is North Ogden City located at 505 E. 2600 North, North Ogden, Utah 84414.
 - E. ENGINEER. The Engineer is ESI Engineering located at 4141 W 2100 S, West Valley City, UT 84120.
 - F. All other terms used in these Instructions to Bidders are defined in the Standard General Conditions of the Construction Contract, EJCDC C-700 Copyright 2007 NSPE for EJCDC - Reference Number 00 72 00.

ARTICLE 2 – COPIES OF BIDDING DOCUMENTS

- 2.01 Complete sets of Bidding Documents shall be used in preparing Bids; neither Owner nor Engineer assumes any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.
- 2.02 Owner and Engineer, in making copies of Bidding Documents available on the above terms, do so only for the purpose of obtaining Bids for the Work and do not authorize or confer a license for any other use.

ARTICLE 3 – QUALIFICATIONS OF BIDDERS

- 3.01 To demonstrate Bidder’s qualifications to perform the Work, within seven (7) days of Owner’s request, Bidder shall submit written evidence such as financial data, previous experience, present commitments, and such other data as may be called for below.
- A. Evidence of Bidder’s authority to do business in the state where the Project is located.
 - B. Bidder’s state contractor license number.

- C. A current financial statement for the Work (as provided to bonding company);
 - D. A chronological list of "in progress" and "completed" construction work done by Bidder during the last two (2) years; including project name, address, owner, contract name, and current telephone number;
 - E. Present construction commitments other than items listed in paragraph D. above;
 - F. Proposed organizational structure such as firm ownership, project manager, progress scheduler, and superintendent for the Work for this Project;
 - G. Owned and rented equipment which is to be used to do the Work;
 - H. Investigations, arbitration, litigation or claims which are pending, threatened, settled or otherwise disposed of within the last three (3) years;
 - I. Evidence of ability to perform and complete the Work in a manner and within the time limit specified. As a minimum, identify specific experience on projects similar to the Work in physical size, cost, and nature. If the work experiences of the project manager and superintendent designated to construct this project are different than that of the Bidder, provide resumes of their work history. Include their actual project titles and indicate their actual responsibilities on each given project;
 - J. All matters consistent with federal, state and local laws and regulations; and
 - K. Such other data as may be requested by the Engineer.
 - L. If Bidder believes any information should be held confidential for business reasons, Bidder must submit a written claim of business confidentiality for that particular information and include a specific statement of the reasons supporting the claim pursuant to Utah Code Ann. 63-2-308.
 - M. Untimely response or failure to provide the requested information by Bidder will release Owner of any obligation to further consider the Bidder's Bid.
- 3.02 Bidder is advised to carefully review those portions of the Bid Form requiring Bidder's representations and certifications.
- 3.03 The submission of a Bid will constitute an incontrovertible representation by Bidder that their Bid is genuine and no collusion is connected herewith.

ARTICLE 4 – EXAMINATION OF BIDDING DOCUMENTS, OTHER RELATED DATA, AND SITE

- 4.01 *Subsurface and Physical Conditions* – In general, prior to submitting a Bid, each Bidder shall review all available explorations, tests and data concerning surface conditions, subsurface conditions and Underground Facilities at or contiguous to the site, or otherwise, which may

affect cost, progress, performance or furnishing of the Work in accordance with the time, price and other terms and conditions of the Contract Documents. A soils report has not been prepared for the proposed site. Soil conditions have not been assessed. All excavations will be in unclassified soil. Contractor shall be responsible to perform excavation work in wet conditions, if encountered. Tracked equipment may be required for all excavation. Bid amounts will not be altered due to wet conditions.

A. The Supplementary Conditions identify:

1. Those reports known to Owner of explorations and tests of subsurface conditions at or contiguous to the Site.
2. Those drawings known to Owner of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities).

B. Copies of reports and drawings referenced in Paragraph 4.01.A will be made available by Owner to any Bidder on request. Those reports and drawings are not part of the Contract Documents, but the “technical data” contained therein upon which Bidder is entitled to rely as provided in Paragraph 4.02 of the General Conditions has been identified and established in Paragraph 4.02 of the Supplementary Conditions. Bidder is responsible for any interpretation or conclusion Bidder draws from any “technical data” or any other data, interpretations, opinions, or information contained in such reports or shown or indicated in such drawings.

4.02 *Underground Facilities*

A. Information and data shown or indicated in the Bidding Documents with respect to existing Underground Facilities at or contiguous to the Site is based upon information and data furnished to Owner and Engineer by owners of such Underground Facilities, including Owner, or others. The Owner and Engineer do not assume responsibility for the accuracy or completeness thereof.

4.03 *Hazardous Environmental Condition*

A. The Supplementary Conditions identify any reports and drawings known to Owner relating to a Hazardous Environmental Condition identified at the Site.

B. Copies of reports and drawings referenced in Paragraph 4.03.A will be made available by Owner to any Bidder on request. Those reports and drawings are not part of the Contract Documents, but the “technical data” contained therein upon which Bidder is entitled to rely as provided in Paragraph 4.06 of the General Conditions has been identified and established in Paragraph 4.06 of the Supplementary Conditions. Bidder is responsible for any interpretation or conclusion Bidder draws from any “technical data” or any other data, interpretations, opinions, or information contained in such reports or shown or indicated in such drawings.

4.04 Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to subsurface conditions, other physical conditions, and Underground Facilities, and possible changes in the Bidding Documents due to differing or unanticipated subsurface or physical conditions appear in Paragraphs 4.02, 4.03, and 4.04 of the General Conditions. Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders

with respect to a Hazardous Environmental Condition at the Site, if any, and possible changes in the Contract Documents due to any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work, appear in Paragraph 4.06 of the General Conditions.

- 4.05 On request, Owner will provide Bidder access to the Site to conduct such examinations, investigations, explorations, tests, and studies as Bidder deems necessary for submission of a Bid. Bidder shall fill all holes and clean up and restore the Site to its former condition upon completion of such explorations, investigations, tests, and studies. Bidder shall comply with all applicable Laws and Regulations relative to excavation and utility locates.
- 4.06 A. Reference is made to Article 7 of the Supplementary Conditions for the identification of the general nature of other work that is to be performed at the Site by Owner or others (such as utilities and other prime contractors) that relates to the Work contemplated by these Bidding Documents. On request, Owner will provide to each Bidder for examination access to or copies of contract documents (other than portions thereof related to price) for such other work.
- B. Paragraph 6.13.C of the General Conditions indicates that if an Owner safety program exists, it will be noted in the Supplementary Conditions.
- 4.07 It is the responsibility of each Bidder before submitting a Bid to:
- A. Examine and carefully study the Bidding Documents, and the other related data identified in the Bidding Documents;
- B. Visit the Site and become familiar with and satisfy Bidder as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work;
- C. Become familiar with and satisfy Bidder as to all federal, state, and local Laws and Regulations that may affect cost, progress, and performance of the Work;
- D. Carefully study all: (1) reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities) that have been identified in Paragraph 4.02 of the Supplementary Conditions as containing reliable "technical data," and (2) reports and drawings of Hazardous Environmental Conditions, if any, at the Site that have been identified in the Paragraph 4.06 of the Supplementary Conditions as containing reliable "technical data";
- E. Consider the information known to Bidder; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and the Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, including applying any specific means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents; and (3) Bidder's safety precautions and programs;

- F. Agree at the time of submitting its Bid that no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of its Bid for performance of the Work at the price(s) bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents;
 - G. Become aware of the general nature of the work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents;
 - H. Promptly give Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder discovers in the Bidding Documents and confirm that the written resolution thereof by Engineer is acceptable to Bidder; and
 - I. Determine that the Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance of the Work.
- 4.08 The submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article 4, that without exception the Bid is premised upon performing and furnishing the Work required by the Bidding Documents and applying any specific means, methods, techniques, sequences, and procedures of construction that may be shown or indicated or expressly required by the Bidding Documents, that Bidder has given Engineer written notice of all conflicts, errors, ambiguities, and discrepancies that Bidder has discovered in the Bidding Documents and the written resolutions thereof by Engineer are acceptable to Bidder, and that the Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performing and furnishing the Work.

ARTICLE 5 – PRE-BID CONFERENCE

No pre-bid conference will be held for this project.

ARTICLE 6 – SITE AND OTHER AREAS

The Site is identified in the Bidding Documents. Easements for permanent structures or permanent changes in existing facilities are to be obtained and paid for by Owner unless otherwise provided in the Bidding Documents. All additional lands and access thereto required for temporary construction facilities, construction equipment, or storage of materials and equipment to be incorporated in the Work are to be obtained and paid for by Contractor.

ARTICLE 7 – INTERPRETATIONS AND ADDENDA

- 7.01 All questions about the meaning or intent of the Bidding Documents are to be submitted to Engineer in writing. Interpretations or clarifications considered necessary by Engineer in response to such questions will be issued by Addenda mailed or delivered to all parties recorded by Engineer as having received the Bidding Documents. Questions received less than seven days prior to the date for opening of Bids may not be answered. Only questions answered by Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.
- 7.02 Addenda may be issued to clarify, correct, or change the Bidding Documents as deemed advisable by Owner or Engineer.
- 7.03 Owner will not accept any deviations from the printed terms of the Agreement and Contract Documents, except by Addendum or Change Order.

ARTICLE 8 – BID SECURITY

- 8.01 A Bid must be accompanied by Bid security made payable to Owner in an amount of 5% percent of Bidder's maximum Bid price and in the form of a certified check, bank money order, or a Bid bond issued by a surety meeting the requirements of Paragraphs 5.01 and 5.02 of the General Conditions.
- 8.02 The Bid security of the Successful Bidder will be retained until such Bidder has executed the Contract Documents, furnished the required contract security and met the other conditions of the Notice of Award, whereupon the Bid security will be returned. If the Successful Bidder fails to execute and deliver the Contract Documents and furnish the required contract security within 15 days after the Notice of Award, Owner may consider Bidder to be in default, annul the Notice of Award, and the Bid security of that Bidder will be forfeited. Such forfeiture shall be Owner's exclusive remedy if Bidder defaults. The Bid security of other Bidders whom Owner believes to have a reasonable chance of receiving the award may be retained by Owner until the earlier of seven days after the Effective Date of the Agreement or 61 days after the Bid opening, whereupon Bid security furnished by such Bidders will be returned.
- 8.03 Bid security of other Bidders whom Owner believes do not have a reasonable chance of receiving the award will be returned within seven days after the Bid opening.

ARTICLE 9 – CONTRACT TIMES

The number of days within which, or the dates by which, the Work is to be substantially completed and ready for final payment are set forth in the Bid Agreement. See Article 6 of the Bid Documents

ARTICLE 10 – LIQUIDATED DAMAGES

10.01 Provisions for liquidated damages, if any, are set forth in the Agreement.

ARTICLE 11 – SUBSTITUTE AND “OR-EQUAL” ITEMS

11.01 The Contract, if awarded, will be on the basis of materials and equipment specified or described in the Bidding Documents without consideration of possible substitute or “or-equal” items. Whenever it is specified or described in the Bidding Documents that a substitute or “or-equal” item of material or equipment may be furnished or used by Contractor if acceptable to Engineer, application for such acceptance will not be considered by Engineer until after the Effective Date of the Agreement.

ARTICLE 12 – SUBCONTRACTORS, SUPPLIERS AND OTHERS

12.01 If the Supplementary Conditions require the identity of certain Subcontractors, Suppliers, individuals, or entities to be submitted to Owner in advance of a specified date prior to the Effective Date of the Agreement, the apparent Successful Bidder, and any other Bidder so requested, shall within five days after Bid opening, submit to Owner a list of all such Subcontractors, Suppliers, individuals, or entities proposed for those portions of the Work for which such identification is required. Such list shall be accompanied by an experience statement with pertinent information regarding similar projects and other evidence of qualification for each such Subcontractor, Supplier, individual, or entity if requested by Owner. If Owner or Engineer, after due investigation, has reasonable objection to any proposed Subcontractor, Supplier, individual, or entity, Owner may, before the Notice of Award is given, request apparent Successful Bidder to submit a substitute, without an increase in the Bid.

12.02 If apparent Successful Bidder declines to make any such substitution, Owner may award the Contract to the next lowest Bidder that proposes to use acceptable Subcontractors, Suppliers, individuals, or entities. Declining to make requested substitutions will not constitute grounds for forfeiture of the Bid security of any Bidder. Any Subcontractor, Supplier, individual, or entity so listed and against which Owner or Engineer makes no written objection prior to the giving of the Notice of Award will be deemed acceptable to Owner and Engineer subject to revocation of such acceptance after the Effective Date of the Agreement as provided in Paragraph 6.06 of the General Conditions.

ARTICLE 13 – PREPARATION OF BID

- 13.01 The Bid Form is included with the Bidding Documents. Additional copies may be obtained from Engineer.
- 13.02 All blanks on the Bid Form shall be completed in ink and the Bid Form signed in ink. Erasures or alterations shall be initialed in ink by the person signing the Bid Form. A Bid price shall be indicated for each Bid item listed therein.
- 13.03 A Bid by a corporation shall be executed in the corporate name by the president or a vice-president or other corporate officer accompanied by evidence of authority to sign. The corporate seal shall be affixed and attested by the secretary or an assistant secretary. The corporate address and state of incorporation shall be shown.
- 13.04 A Bid by a partnership shall be executed in the partnership name and signed by a partner (whose title must appear under the signature), accompanied by evidence of authority to sign. The official address of the partnership shall be shown.
- 13.05 A Bid by a limited liability company shall be executed in the name of the firm by a member and accompanied by evidence of authority to sign. The state of formation of the firm and the official address of the firm shall be shown.
- 13.06 A Bid by an individual shall show the Bidder's name and official address.
- 13.07 A Bid by a joint venture shall be executed by each joint venturer in the manner indicated on the Bid Form. The official address of the joint venture shall be shown.
- 13.08 All names shall be printed in ink below the signatures.
- 13.09 The Bid shall contain an acknowledgment of receipt of all Addenda, the numbers of which shall be filled in on the Bid Form.
- 13.10 Postal and e-mail addresses and telephone number for communications regarding the Bid shall be shown.
- 13.11 The Bid shall contain evidence of Bidder's authority and qualification to do business in the state where the Project is located, or Bidder shall covenant in writing to obtain such authority and qualification prior to award of the Contract and attach such covenant to the Bid. Bidder's state contractor license number, if any, shall also be shown on the Bid Form.

ARTICLE 14 – BASIS OF BID; COMPARISON OF BIDS

14.01 *Lump Sum*

- A. Bidders shall submit a Bid on a lump sum basis as set forth in the Bid Form.

14.02 *Unit Price*

- A. Bidders shall submit a Bid on a unit price basis for each item of Work listed in the Bid schedule.
- B. The total of all estimated prices will be the sum of the products of the estimated quantity of each item and the corresponding unit price. The final quantities and Contract Price will be determined in accordance with Paragraph 11.03 of the General Conditions.
- C. Discrepancies between the multiplication of units of Work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum.

14.03 *Allowances*

- A. For cash allowances the Bid price shall include such amounts as the Bidder deems proper for Contractor's overhead, costs, profit, and other expenses on account of cash allowances, if any, named in the Contract Documents, in accordance with Paragraph 11.02.B of the General Conditions.

ARTICLE 15 – SUBMITTAL OF BID

- 15.01 A bound or unbound copy of the Bid Form is to be completed and submitted with the Bid security.
- 15.02 A Bid shall be submitted no later than the date and time prescribed and at the place indicated in the advertisement or invitation to bid and shall be accompanied by the Bid security and other required documents. Bids will be received by North Ogden City at 505 E 2600 N. North Ogden City, UT 84414. Bids shall be clearly marked on the outside of sealed packaging “450 EAST WIDENING PROJECT – PHASE 2 BID ENCLOSED”.

ARTICLE 16 – MODIFICATION AND WITHDRAWAL OF BID

- 16.01 A Bid may be modified or withdrawn by an appropriate document duly executed in the same manner that a Bid must be executed and delivered to the place where Bids are to be submitted prior to the date and time for the opening of Bids.
- 16.02 If within 24 hours after Bids are opened any Bidder files a duly signed written notice with Owner and promptly thereafter demonstrates to the reasonable satisfaction of Owner that there was a material and substantial mistake in the preparation of its Bid, that Bidder may withdraw its Bid, and the Bid security will be returned. Thereafter, if the Work is rebid, that Bidder will be disqualified from further bidding on the Work.

ARTICLE 17 – OPENING OF BIDS

17.01 Bids will be opened Thursday February 15th, 2024 the time and read aloud publicly. An abstract of the amounts of the base Bids and major alternates, if any, will be made available to Bidders after the opening of Bids.

ARTICLE 18 – BIDS TO REMAIN SUBJECT TO ACCEPTANCE

18.01 All Bids will remain subject to acceptance for the period of time stated in the Bid Form, but Owner may, in its sole discretion, release any Bid and return the Bid security prior to the end of this period.

ARTICLE 19 – EVALUATION OF BIDS AND AWARD OF CONTRACT

19.01 Owner reserves the right to reject any or all Bids, including without limitation, nonconforming, non-responsive, unbalanced, or conditional Bids. Owner further reserves the right to reject the Bid of any Bidder whom it finds, after reasonable inquiry and evaluation, to not be responsible. Owner may also reject the Bid of any Bidder if Owner believes that it would not be in the best interest of the Project to make an award to that Bidder. Owner also reserves the right to waive all informalities not involving price, time, or changes in the Work and to negotiate contract terms with the Successful Bidder.

19.02 More than one Bid for the same Work from an individual or entity under the same or different names will not be considered. Reasonable grounds for believing that any Bidder has an interest in more than one Bid for the Work may be cause for disqualification of that Bidder and the rejection of all Bids in which that Bidder has an interest.

19.03 In evaluating Bids, Owner will consider whether or not the Bids comply with the prescribed requirements, and such alternates, unit prices and other data, as may be requested in the Bid Form or prior to the Notice of Award.

19.04 In evaluating Bidders, Owner will consider the qualifications of Bidders and may consider the qualifications and experience of Subcontractors, Suppliers, and other individuals or entities proposed for those portions of the Work for which the identity of Subcontractors, Suppliers, and other individuals or entities must be submitted as provided in the Supplementary Conditions.

19.05 Owner may conduct such investigations as Owner deems necessary to establish the responsibility, qualifications, and financial ability of Bidders, proposed Subcontractors, Suppliers, individuals, or entities proposed for those portions of the Work in accordance with the Contract Documents.

19.06 After a review of responsible bidders, the Owner will conduct the “Choosing by Advantages” (CBA) decision making evaluation. Choosing by Advantages “CBA” is the process adopted by the Owner to aid in awarding contracts. CBA is based on the fundamental rule of decision

making that “Decision must be based on the importance of advantages”. An advantage is defined as a positive difference between two alternatives. The advantages of a proposal are compared to the advantages found in other proposals to determine which is preferred.

- 19.07 CBA weighs the advantage of the preferred proposal to the additional cost when awarding contracts. Consequently, the CBA analysis may result in awarding the project to a contractor other than the low Bidder. In the evaluation, the lowest Bidder’s qualifications and proposal will be compared to the other Bidder’s qualifications and proposals. The project will be awarded independently of the cost when distinct advantages in the proposal are found to be of significance by the evaluation committee. This occurs when the cost to gain the advantage is considered appropriate. Predetermined factors listed in the Choosing by Advantages Decision Making Form will govern the evaluation process and selection of the successful Bidder. Some Factors may be more important than others and will carry more weight in the decision-making process.

ARTICLE 20 – CONTRACT SECURITY AND INSURANCE

- 20.01 Article 5 of the General Conditions, as may be modified by the Supplementary Conditions, sets forth Owner’s requirements as to performance and payment bonds and insurance. When the Successful Bidder delivers the executed Agreement to Owner, it shall be accompanied by such bonds.

ARTICLE 21 – SIGNING OF AGREEMENT

- 21.01 When Owner issues a Notice of Award to the Successful Bidder, it shall be accompanied by the required number of unsigned counterparts of the Agreement along with the other Contract Documents which are identified in the Agreement as attached thereto. Within 15 days thereafter, Successful Bidder shall sign and deliver the required number of counterparts of the Agreement and attached documents to Owner. Within ten days thereafter, Owner shall deliver one fully signed counterpart to Successful Bidder with a complete set of the Drawings with appropriate identification.

SECTION 00 41 00

BID FORM

CITY OF NORTH OGDEN

450 EAST WIDENING PROJECT

PROJECT #24-131

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ARTICLE 1 – BID RECIPIENT

- 1.01 This Bid is submitted to: North Ogden City
- 1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

ARTICLE 2 – BIDDER’S ACKNOWLEDGEMENTS

- 2.01 Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for 90 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner. Anticipated NTP is May 2024.

ARTICLE 3 – BIDDER’S REPRESENTATIONS

- 3.01 In submitting this Bid, Bidder represents that:
 - A. Bidder has examined and carefully studied the Bidding Documents, other related data identified in the Bidding Documents, and the following Addenda, receipt of which is hereby acknowledged:

<u>Addendum No.</u>	<u>Addendum Date</u>
_____	_____
_____	_____
_____	_____

- B. Bidder has visited the Site and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
- C. Bidder is familiar with and is satisfied as to all Laws and Regulations that may affect cost, progress, and performance of the Work.
- D. Bidder has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities) that have been identified in SC-4.02 as containing reliable "technical data," and (2) reports and drawings of Hazardous Environmental Conditions, if any, at the Site that have been identified in SC-4.06 as containing reliable "technical data."
- E. Bidder has considered the information known to Bidder; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and the Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the

means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, including applying the specific means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents; and (3) Bidder's safety precautions and programs.

- F. Based on the information and observations referred to in Paragraph 3.01.E above, Bidder does not consider that further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price(s) bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents.
- G. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
- H. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and the written resolution thereof by Engineer is acceptable to Bidder.
- I. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance of the Work for which this Bid is submitted.

ARTICLE 4 – BIDDER'S CERTIFICATION

4.01 Bidder certifies that:

- A. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation;
- B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid;
- C. Bidder has not solicited or induced any individual or entity to refrain from bidding; and
- D. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 4.01.D:
 - 1. "corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the bidding process;
 - 2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
 - 3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels; and

4. “coercive practice” means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

4.02 For public work, relevant requirements of Laws and Regulations in the jurisdiction where Work is to be performed should be coordinated with the language of this paragraph.

ARTICLE 5 – BASIS OF BID

5.01 Bidder will complete the Work in accordance with the Contract Documents for the following prices:

5.02 UNIT PRICE BID

Bid Schedule A - Roadway

Item	Description	Total Amount	Units	Unit Price	Total
1	Mobilization	1	LS		
2	Traffic Control	1	LS		
3	Survey Construction Staking	1	LS		
4	Pothole existing utility as needed	3	EA		
5	Remove concrete curb and gutter	1600	FT		
6	Remove concrete sidewalk	295	SQ YD		
7	Remove concrete driveway	620	SQ YD		
8	Remove asphalt pavement	9880	SQ YD		
9	Remove tree	41	EA		
10	Remove catch basin	7	EA		
11	Reconstruct catch basin	2	EA		
12	Relocate irrigation junction box	3	EA		
13	Relocate irrigation valve	2	EA		
14	Remove pipe	170	FT		
15	Roadway excavation (Plan Quantity)	3200	CY		
16	Borrow soft spot repair	495	CY		
17	Catch Basin	1	EA		
18	Double Catch Basin	2	EA		
19	18" RCP Storm drain Pipe	135	FT		
20	24" RCP Storm drain Pipe	66	FT		
21	4" Sewer lateral w/ tracer wire	450	FT		
22	Connect new 4" sewer lateral to existing wye	6	EA		
23	Borrow (Plan Quantity)	1060	CY		
24	Untreated base course (Plan Quantity)	2390	CY		
25	HMA - 1/2 inch	3700	TN		
26	Concrete curb and gutter	1525	FT		
27	Concrete waterway	280	SQ FT		
28	Concrete sidewalk	5250	SQ FT		
29	Concrete Driveway, flared, 6 inch thick	400	SQ FT		
30	Pedestrian access ramp	8	EA		
31	Reconstruct manhole	14	EA		
32	Reconstruct valve	12	EA		
33	Relocate sign	3	EA		
34	New sign, post, and base	2	EA		
35	Mailbox assembly	4	EA		
36	Decorative landscape - parkstrip	4820	SQ FT		

37	450 East & 3100 North Traffic Signal	1	LS		
38	ITS System	1	LS		
39	Striping as shown on plan sheets	1	LS		
40	Re-establish existing landscape and pressurized irrigation system	1	LS		
41	Remove existing water meter	9	EA		
42	Relocate existing fire hydrant	4	EA		
43	Water meter	6	EA		
44	6" Gate valve	1	EA		
45	1" HDPE poly lateral	550	LF		
46	6" 45° MJ	2	EA		
47	12" 45° MJ	2	EA		
48	6" C900 PVC water line	250	LF		
49	¾"x1" Corp Stop	6	EA		
50	Grounding clamp	6	EA		
	Subtotal (Items 1-50)				

Bid Schedule B - Waterline

Item	Description	Total Amount	Units	Unit Price	Total
1	New fire hydrant assembly	1	EA		
2	¾" HDPE poly lateral	150	FT		
3	12" C900 DR14 water line	400	FT		
4	12"x8" Reducer	1	EA		
5	8" C900 PVC water line	40	FT		
6	8" Sleeve or Alpha	2	EA		
7	8" 45° MJ	2	EA		
8	12" x ¾" Saddle	3	EA		
9	12" x 1" Saddle	4	EA		
10	Valve box w/ monument & concrete collar	1	EA		
Subtotal (Items 1-10)					

Bid Schedule C – Pineview Irrigation

Item	Description	Total Amount	Units	Unit Price	Total
1	Relocate ex. Pineview irrigation 2" service to new park strip & reconnect to resident's private system	1	EA		
2	Relocate ex. Pineview irrigation 1" service to new park strip & reconnect to resident's private system	2	EA		
3	Furnish & Install 12" gate valve	1	EA		
4	Furnish & Install 12" DR18 Pipe	135	LF		

Unit Prices have been computed in accordance with Paragraph 11.03.B of the General Conditions.

Bidder acknowledges that estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all unit price Bid items will be based on actual quantities, determined as provided in the Contract Documents.

5.03 MEASUREMENT AND PAYMENT

Bid Schedule A

Bid Item 1 – Mobilization:

Measurement shall be per lump sum. Payment will be made according to the percentage of the total contract work completed (i.e., 50% paid when 50% of the work is completed). Payment includes the following work and items:

- A. Secure permits, bonds, and insurance;
- B. Move equipment and personnel to and from the job site;
- C. Complete all other miscellaneous responsibilities and operations not generally attributed to any other single bid item.

Bid Item 2 – Traffic Control:

Measurement shall be per lump sum. Payment will be made according to the percentage of the total contract work completed (i.e., 50% paid when 50% of the work is completed). Payment includes the following work and items:

- A. Provide traffic control plan, barricades, signs and devices; and
- B. Complete all other miscellaneous responsibilities and operations not generally attributed to any other single bid item.

Bid Item 3 – Survey Construction Staking:

Measurement shall be per lump sum. Payment will be made according to the percentage of the total contract work completed (i.e., 50% paid when 50% of the work is completed). Payment includes the following work and items:

- A. Provide surveyed construction staking;
- B. Complete all other items and operations necessary for survey.

Bid Item 4 – Pothole existing utility as needed:

Measurement shall be per unit. Payment will be made according to the unit total. Payment shall be full compensation for all labor, material, and equipment necessary to pothole existing utilities. Payment includes the following items and tasks:

- A. Locate and pothole existing utility as directed by the engineer;
- B. Perform necessary measurements, and repair pothole;
- C. Complete all other items and operations necessary for pothole of the existing utility

Bid Item 5 – Remove concrete curb and gutter:

Measurement shall be per lineal foot. Payment shall be full compensation for all labor, material, and equipment to provide the work specified and includes:

- A. Locate and protect existing utilities;
- B. Demolition and disposal of existing concrete curb and gutter;
- C. Dust control;
- D. Clean-up; and
- E. All other appurtenant activities and devices necessary to provide the above listed items complete.

Bid Item 6 – Remove concrete sidewalk:

Measurement shall be per square yard. Payment shall be full compensation for all labor, material, and equipment to provide the work specified and includes:

- A. Locate and protect existing utilities;
- B. Demolition and disposal of existing concrete sidewalk;
- C. Dust control;
- D. Clean-up; and
- E. All other appurtenant activities and devices necessary to provide the above listed items complete.

Bid Item 7 – Remove concrete driveway:

Measurement shall be per square yard. Payment shall be full compensation for all labor, material, and equipment to provide the work specified and includes:

- A. Locate and protect existing utilities;
- B. Demolition and disposal of existing concrete driveway;
- C. Dust control;
- D. Clean-up; and
- E. All other appurtenant activities and devices necessary to provide the above listed items complete.

Bid Item 8 – Remove asphalt pavement:

Measurement shall be per square yard. Payment shall be full compensation for all labor, material, and equipment to provide the work specified and includes:

- A. Locate and protect existing utilities;
- B. Sawcut existing asphalt as shown on the plans
- C. Demolition and disposal of existing asphalt;
- D. Dust control;

- E. Clean-up; and
- F. All other appurtenant activities and devices necessary to provide the above listed items complete.

Bid Item 9 – Remove tree:

Measurement shall be per unit. Payment shall be full compensation for all labor and equipment necessary to remove the existing tree. Payment includes the following items and tasks:

- A. Locate and protect existing utilities;
- B. Demolition and disposal of existing tree including trunk and root removal;
- C. Clean up; and
- D. All other appurtenant activities and devices necessary to provide the above listed items complete.

Bid Item 10 – Remove catch basin:

Measurement shall be per unit. Payment shall be full compensation for all labor and equipment necessary to remove the existing catch basin. Payment includes the following items and tasks:

- A. Locate and protect existing catch basin;
- B. Disconnect from existing storm drain system;
- C. Remove, haul away, and dispose of existing catch basin;
- D. Clean up; and
- E. All other appurtenant activities and devices necessary to provide the above listed items complete.

Bid Item 11 – Reconstruct catch basin:

Measurement shall be per unit. Payment shall be full compensation for all labor and equipment necessary to reconstruct the existing catch basin. Payment includes the following items and tasks:

- A. Pre-lower and protect existing catch basin;
- A. Raise to design grade;
- B. Install grate and frame as required to fit new curb and gutter alignment;
- C. Complete all other items and operations necessary to reconstruct catch basin.

Bid Item 12 – Relocate irrigation junction box:

Measurement shall be per unit. Payment shall be full compensation for all labor and equipment necessary to relocate the existing irrigation junction box. Payment includes the following items and tasks:

- A. Remove existing irrigation junction box;
- B. Disconnect from irrigation system as required to relocate;
- C. Relocate irrigation junction box to location specified per engineer;
- D. Perform all required irrigation relocations to reconnect junction box to irrigation system;
- E. Complete all other items and operations necessary to relocate irrigation junction box.

Bid Item 13 – Relocate irrigation junction valve:

Measurement shall be per unit. Payment shall be full compensation for all labor and equipment necessary to relocate the existing irrigation valve. Payment includes the following items and tasks:

- A. Remove existing irrigation junction valve;
- B. Disconnect from irrigation system as required to relocate;
- C. Relocate irrigation valve to location specified per engineer;
- D. Perform all required irrigation relocations to reconnect valve to irrigation system;
- E. Complete all other items and operations necessary to relocate irrigation junction box.

Bid Item 14 – Remove Pipe:

Measurement shall be per lineal foot. Payment shall be full compensation for all labor, material, and equipment necessary remove and haul away existing pipe. Payment includes the following items and tasks:

- A. Use appropriate tools to cut and disconnect the abandoned storm drain pipe at their connection to existing manholes and catch basins;
- B. Remove the disconnected portions of storm drain as required, haul away, and dispose of in a safe and legal manner;
- C. Complete all other items and operations necessary for removing and hauling away pipe.

Bid Item 15 – Roadway Excavation (plan quantity):

Measurement shall be per cubic yard. Payment shall be full compensation for all labor, material, and equipment necessary for roadway excavation. Payment includes the following items and tasks:

- A. Locate and protect existing utilities;
- B. Excavate to design depth as indicated on plans;
- C. Remove and dispose of any existing facilities in excavation area per city
- D. Haul away and dispose of unsuitable material;
- E. Stockpile and backfill suitable native granular material (4" minus) for fill material where possible;
- F. Provide dust control and daily cleanup

Note: The thickness of the untreated base course refers to the finished thickness. 8 inches of untreated base course will be required under the new pavement.

Bid Item 16 – Borrow soft spot repair:

Measurement shall be per cubic yard. Payment shall be full compensation for all labor, material, and equipment necessary for roadway excavation. Payment includes the following items and tasks:

- A. Locate and protect existing utilities;
- B. Perform visual inspection for soft spots after roller compaction
- C. Excavate to depth as specified by engineer;
- D. Place and compact borrow;
- E. Complete all other items and operations necessary for soft spot repair;

Bid Item 17 – Catch basin:

Measurement shall be per unit. Payment shall be full compensation for all labor and equipment necessary to install the new catch basin. Payment includes the following items and tasks:

- A. Locate and protect existing utilities;
- B. Install new city standard catch basin;
- C. Connect to new storm drain pipe;
- D. All other appurtenant activities and devices necessary to provide the above listed items complete.

Bid Item 18 – Double Catch basin:

Measurement shall be per unit. Payment shall be full compensation for all labor and equipment necessary to install the new catch basin. Payment includes the following items and tasks:

- A. Locate and protect existing utilities;
- B. Install new city standard double catch basin;
- C. Connect to new storm drain pipe;
- D. All other appurtenant activities and devices necessary to provide the above listed items complete.

Bid Item 19 – 18” RCP storm drain pipe

Measurement shall be per lineal foot. Payment shall be full compensation for all labor, material, and equipment necessary to install storm drain pipe. Payment includes the following items and tasks:

- A. Excavate city standard trench;
- B. Install gravel bedding and backfill as specified by city standard drawings
- C. Install new 18” RCP drain pipe;
- D. And connect to new catch basins structures and existing manholes
- E. Complete all other items and operations necessary to install storm drain pipe.

Bid Item 20 – 24” RCP storm drain pipe

Measurement shall be per lineal foot. Payment shall be full compensation for all labor, material, and equipment necessary to install storm drain pipe. Payment includes the following items and tasks:

- A. Excavate city standard trench;
- B. Install gravel bedding and backfill as specified by city standard drawings
- C. Install new 24” RCP drain pipe;
- D. And connect to new catch basins structures and existing manholes
- E. Complete all other items and operations necessary to install storm drain pipe.

Bid Item 21 – 4” Sewer lateral:

Measurement shall be per lineal foot. Payment shall be full compensation for all labor and equipment necessary to install the 4” sewer lateral. Payment includes the following items and tasks:

- A. Excavate city standard trench and backfill trench;
- A. Install sand backfill sand bedding compacted to 95% modified proctor;
- B. Install 4” sewer line as shown on plans;
- C. Install tracer wire along new sewer lateral;
- D. Ensure proper slope and alignment as to avoid existing utilities;
- E. Complete all other items and operations necessary for installation of the new waterline.

Bid Item 22 – Connect new 4” sewer lateral to existing wye:

Measurement shall be per unit. Payment shall be full compensation for all labor and equipment necessary to connect the 4” sewer lateral. Payment includes the following items and tasks:

- A. Connect to existing sewer main to existing wye;
- B. Complete all other items and operations necessary for connection to wye.

Bid Item 23 – Borrow (plan quantity):

Measurement shall be per cubic yard as measured from weigh tickets. Weigh tickets must include date, time, material type, source, destination, loaded weight, empty weight, and tare weight. Payment shall be full compensation for all labor, material, and equipment necessary to furnish and place borrow. Payment includes the following items and tasks:

- A. Place and compact borrow to the design thickness as indicated on the design drawings;
- B. Compact and grade the borrow to design grades;
- C. Grade 3:1 slope to tie in to existing terrain as shown on plan sheets; and
- D. Provide dust control and daily cleanup

Note: The thickness of the borrow refers to the finished thickness. 12 inches of borrow will be required under the widened pavement area.

Bid Item 24 – Untreated base course (plan quantity):

Measurement shall be per cubic yard as measured from weigh tickets. Weigh tickets must include date, time, material type, source, destination, loaded weight, empty weight, and tare weight. Payment shall be full compensation for all labor, material, and equipment necessary to furnish and place untreated base course. Payment includes the following items and tasks:

- A. Place and compact untreated base course to the design thickness as indicated on the design drawings;
- B. Grade the untreated base course surface to design grades; and
- C. Provide dust control and daily cleanup

Note: The thickness of the untreated base course refers to the finished thickness. 8 inches of untreated base course will be required under the new pavement.

Bid Item 25 – HMA – ½ inch:

Measurement shall be per ton as measured from weigh tickets. Weigh tickets must include date, time, material type, source, destination, loaded weight, empty weight, and tare weight. Payment shall be full compensation for all labor, material, and equipment necessary to furnish and place asphalt. Payment includes the following items and tasks:

- A. Place and compact hot mix asphalt to the design thickness as indicated on the design drawings;
- B. Provide dust control and daily cleanup; and
- C. Complete all other items and operations necessary for new asphalt.

Bid Item 26 – Concrete curb and gutter

Measurement shall be per lineal foot. Payment shall be full compensation for all labor, material, and equipment to install new concrete curb and gutter and includes:

- A. Placement and compaction of 8” untreated base course under curb and gutter;
- B. Concrete, forming, placement, reinforcing, scoring, finishing, curing, sealing;
- C. Dust control;
- D. Clean-up; and
- E. All other appurtenant activities and devices necessary to provide the above listed items complete.

Bid Item 27 – Concrete waterway:

Measurement shall be per square foot. Payment shall be full compensation for all labor, material, and equipment to install new concrete waterway and includes:

- A. Placement and compaction of 8” untreated base course under concrete waterway;
- B. Concrete, forming, placement, reinforcing, scoring, finishing, curing, sealing;
- C. Dust control;
- D. Clean-up; and
- E. All other appurtenant activities and devices necessary to provide the above listed items complete.

Bid Item 28 – Concrete sidewalk:

Measurement shall be per square foot. Payment shall be full compensation for all labor, material, and equipment to install new concrete sidewalk and includes:

- F. Placement and compaction of 4” untreated base course under concrete sidewalk;
- G. Concrete, forming, placement, reinforcing, scoring, finishing, curing, sealing;
- H. Dust control;
- I. Clean-up; and
- J. All other appurtenant activities and devices necessary to provide the above listed items complete.

Bid Item 29 – Concrete driveway, flared, 6 inch thick:

Measurement shall be per square foot. Payment shall be full compensation for all labor, material, and equipment to install new concrete driveway and includes:

- A. Placement and compaction of 8” untreated base course under concrete driveway;
- B. Concrete, forming, placement, reinforcing, scoring, finishing, curing, sealing;
- C. Dust control;
- D. Clean-up; and
- E. All other appurtenant activities and devices necessary to provide the above listed items complete.

Bid Item 30 – Pedestrian access ramp:

Measurement shall be per square foot. Payment shall be full compensation for all labor, material, and equipment to install new pedestrian access ramp and includes:

- A. Placement and compaction of untreated base course under concrete per city standard detail;
- B. Concrete, forming, placement, reinforcing, scoring, finishing, curing, sealing;
- C. Dust control;
- D. Clean-up; and
- E. All other appurtenant activities and devices necessary to provide the above listed items complete.

Bid Item 31 – Reconstruct manhole:

Measurement shall be per unit. Payment shall be full compensation for all labor and equipment necessary to reconstruct the manhole. Payment includes the following items and tasks:

- A. Lower and protect existing manhole;
- B. Reconstruct and adjust manhole to final elevation with concrete rings
- C. Install concrete collar
- D. All other appurtenant activities and devices necessary to provide the above listed items complete.

Bid Item 32 – Reconstruct valve:

Measurement shall be per unit. Payment shall be full compensation for all labor and equipment necessary to reconstruct the valve. Payment includes the following items and tasks:

- A. Lower and protect existing valve;
- B. Reconstruct and adjust valve to final elevation with concrete rings
- C. Install concrete collar
- D. All other appurtenant activities and devices necessary to provide the above listed items complete.

Bid Item 33 – Relocate sign:

Measurement shall be per unit. Payment shall be full compensation for all labor and equipment necessary to remove the existing sign, post, and base. Payment includes the following items and tasks:

- A. Relocation of existing sign and post;
- B. Installation of new sign base;
- C. All other appurtenant activities and devices necessary to provide the above listed items complete.

Bid Item 34 – New sign, post, and base:

Measurement shall be per unit. Payment shall be full compensation for all labor and equipment necessary to remove the existing sign, post, and base. Payment includes the following items and tasks:

- A. Installation of new sign, post, and base;
- B. Type and location to be approved by city;
- C. All other appurtenant activities and devices necessary to provide the above listed items complete.

Bid Item 35 – Mailbox assembly:

Measurement shall be per unit. Payment shall be full compensation for all labor and equipment necessary to remove the existing sign, post, and base. Payment includes the following items and tasks:

- A. Installation of new mailbox assembly;
- B. Type and location to be approved by city;
- C. All other appurtenant activities and devices necessary to provide the above listed items complete.

Bid Item 36 – Decorative landscape - parkstrip:

Measurement shall be a lump sum. Payment shall be full compensation for all labor, material, and equipment to provide the work specified and includes:

- A. Installation of 2” landscape rock in new park strip as shown on plans;
- B. Material color and size to be approved by city;
- C. Remove any debris from properties and roadway;
- D. All other appurtenant activities and devices necessary to provide the above listed items complete.

Bid Item 37 – 450 East & 3100 North Traffic Signal:

Measurement shall be a lump sum. Payment shall be full compensation for all labor, material, and equipment to provide the work specified and includes:

- A. Remove existing signal equipment and salvage to the city;
- B. Materials and installation of signal as shown on signal sheets;
- C. Connections to power;
- D. Remove debris from properties and roadway;
- E. All other appurtenant activities and devices necessary to provide the above listed items complete.

Bid Item 38 – ITS System:

Measurement shall be a lump sum. Payment shall be full compensation for all labor, material, and equipment to provide the work specified and includes:

- A. Trench & install conduit, fiber, and junction box;
- B. Connect to existing and proposed signal facilities;
- C. Remove debris from properties and roadway;
- D. All other appurtenant activities and devices necessary to provide the above listed items complete.

Bid Item 39 – Striping as shown on plan sheets:

Measurement shall be per lump sum. Payment will be made according to the percentage of the total contract work completed (i.e., 50% paid when 50% of the work is completed). Payment includes the following work and items:

- A. Installation of pavement striping and messages as shown on plan sheets;
- B. Clean-up; and
- C. All other appurtenant activities and devices necessary to provide the above listed items complete.

Bid Item 40 – Re-establish existing landscape and pressurized irrigation system:

Measurement shall be a lump sum. Payment shall be full compensation for all labor, material, and equipment to provide the work specified and includes:

- A. Repair any damaged sprinklers as a result of construction in the project area;
- B. Restore the project site to its original condition or better;
- C. Remove debris from properties and roadway;
- D. Dust control;
- E. Clean-up; and
- F. All other appurtenant activities and devices necessary to provide the above listed items complete.

Bid Item 41 – Remove existing water meter:

Measurement shall be per unit. Payment shall be full compensation for all labor and equipment necessary to remove the existing water meter. Payment includes the following items and tasks:

- A. Remove existing meter including setter, water lateral to the existing mainline, and haul to North Ogden City as directed by the engineer;
- B. Complete all other items and operations necessary to remove and salvage water meters.

Bid Item 42 – Relocate existing fire hydrant:

Measurement shall be per unit. Payment shall be full compensation for all labor, material, and equipment necessary to relocate the existing fire hydrants. Payment includes the following items and tasks:

- A. Remove existing hydrant assembly including fire hydrant, waterline to the existing valve, bends, and thrust blocks;
- B. Extend 6" C900 waterline to new fire hydrant location;
- C. Reset existing fire hydrant and assembly to new park strip location;
- D. Install new concrete thrust blocks and concrete pad per city standards;
- E. Complete all other items and operations necessary to remove and salvage fire hydrants.

Bid Item 43 – Water meter:

Measurement shall be per unit. Payment shall be full compensation for all labor and equipment necessary to install the new water meter. Payment includes the following items and tasks:

- A. Install new meter setter in locations shown on the design plans;
- B. Connect new 1" HDPE poly lateral to new meter setter and existing mainline;
- C. Tie in existing home service to new setter;
- D. Restore landscaping to its original condition;
- E. Complete all other items and operations necessary for installation of the new setter;

Bid Item 44 – 6" Gate Valve:

Measurement shall be per unit. Payment shall be full compensation for all labor and equipment necessary to install the 6" gate valve. Payment includes the following items and tasks:

- A. Install 6" gate valve;
- B. Perform connect to new 6" C900 PVC waterline;
- C. adjust valve to final elevation with concrete rings;
- D. Install concrete collar;
- E. Complete all other items and operations necessary to install 6" gate valve.

Bid Item 45 – 1” HDPE poly lateral:

Measurement shall be per lineal foot. Payment shall be full compensation for all labor and equipment necessary to install the 1” HDPE poly lateral. Payment includes the following items and tasks:

- A. Excavate city standard trench;
- B. Install sand backfill sand bedding compacted to 95% modified proctor;
- C. Install 1” HDPE poly lateral in locations shown on the design plans;
- D. Install locator wire and warning ribbon;
- E. Ensure proper slope and alignment as to avoid existing utilities;
- F. Complete all other items and operations necessary for installation of the new lateral.

Bid Item 46 – 6” 45 MJ :

Measurement shall be per unit. Payment shall be full compensation for all labor and equipment necessary to install the 6” 45 MJ. Payment includes the following items and tasks:

- A. Locate and protect existing utilities;
- B. Install 6” 45 MJ with thrust blocks as required in the field to loop 6” C900 PVC waterline under existing utilities;
- C. Perform connections to new 6” PVC C900 waterline;
- D. Complete all other items and operations necessary for installation of the 45 MJ.

Bid Item 47 – 12” 45 MJ :

Measurement shall be per unit. Payment shall be full compensation for all labor and equipment necessary to install the 12” 45 MJ. Payment includes the following items and tasks:

- A. Locate and protect existing utilities;
- B. Install 12” 45 MJ with thrust blocks as required in the field to loop 12” DR14 PVC waterline under existing utilities;
- C. Perform connections to new 12” C900 DR14 waterline;
- D. Complete all other items and operations necessary for installation of the 45 MJ.

Bid Item 48 – 6” PVC water line:

Measurement shall be per lineal foot. Payment shall be full compensation for all labor and equipment necessary to install the 6”C900 PVC waterline. Payment includes the following items and tasks:

- A. Excavate city standard trench;
- B. Install sand backfill sand bedding compacted to 95% modified proctor;
- C. Install 6” PVC C900 DR18 Waterline in locations shown on the design plans;
- D. Ensure proper slope and alignment as to avoid existing utilities;
- E. Complete all other items and operations necessary for installation of the new waterline.

Bid Item 49 – ¾”x1” Corp Stop:

Measurement shall be per unit. Payment shall be full compensation for all labor and equipment necessary to install the ¾”x1” Corp Stop. Payment includes the following items and tasks:

- A. Install ¾”x1” Corp Stop to saddle on existing water main;
- B. Connect to existing HDPE poly lateral;
- C. Complete all other items and operations necessary for installation of the ¾”x1” Corp Stop.

Bid Item 50 – Grounding clamp:

Measurement shall be per unit. Payment shall be full compensation for all labor and equipment necessary to install the grounding clamp. Payment includes the following items and tasks:

- A. Install grounding clamp on pump line with #4 stranded copper wire with lug, ground rod, and run to snakepit location with hydrant or service line as it crosses the pump line to the west side of the road;
- B. Coordinate with North Ogden City Water Department for direction and locations of clamps.

Bid Schedule B

Bid Item 1 – New fire hydrant assembly:

Measurement shall be per unit. Payment shall be full compensation for all labor, material, and equipment necessary to furnish and install new fire hydrant assembly. Payment includes the following items and tasks:

- A. 12x6 hydrant assembly complete with 8"x8"x6" Tee, valve, valve box, lid, and concrete collar, 6" C900 DR14 PVC pipe, new hydrant, snakepit with access point, ground rod, tracer wire and 4'x4' concrete pad, complete.
- B. Connect 6" PVC fire line to existing mainline. Connect 6" PVC fire line to new hydrant with 90° bend and accompanying thrust block;
- C. Complete all other items and operations necessary to furnish and install fire hydrant assembly.

Bid Item 2 – ¾" HDPE poly lateral:

Measurement shall be per lineal foot. Payment shall be full compensation for all labor and equipment necessary to install the ¾" HDPE poly lateral. Payment includes the following items and tasks:

- A. Excavate city standard trench;
- B. Install sand backfill sand bedding compacted to 95% modified proctor;
- C. Install ¾" HDPE poly lateral in locations shown on the design plans;
- D. Install locator wire and warning ribbon;
- E. Ensure proper slope and alignment as to avoid existing utilities;
- F. Complete all other items and operations necessary for installation of the new lateral.

Bid Item 3 – 12" C900 DR14 waterline:

Measurement shall be per lineal foot. Payment shall be full compensation for all labor and equipment necessary to install the 12" C900 DR14 waterline. Payment includes the following items and tasks:

- A. Excavate city standard trench;
- B. Install sand backfill sand bedding compacted to 95% modified proctor;
- C. Install 12" PVC C900 DR14 Waterline in locations shown on the design plans;
- D. Ensure proper slope and alignment as to avoid existing utilities;
- E. Complete all other items and operations necessary for installation of the new waterline.

Bid Item 4 – 12”x8” Reducer:

Measurement shall be per unit. Payment shall be full compensation for all labor, material, and equipment necessary to furnish and install the 12”x8” reducer. Payment includes the following items and tasks:

- A. Perform connection to proposed 12” C900 DR14 waterline;
- B. Perform connection to proposed 8” C900 waterline;
- C. Complete all other items and operations necessary to furnish and install the 12”x 8” reducer.

Bid Item 5 – 8” C900 waterline:

Measurement shall be per lineal foot. Payment shall be full compensation for all labor and equipment necessary to install the 8” C900 waterline. Payment includes the following items and tasks:

- A. Excavate city standard trench;
- B. Install sand backfill sand bedding compacted to 95% modified proctor;
- C. Install 8” PVC C900 waterline in locations shown on the design plans;
- D. Ensure proper slope and alignment as to avoid existing utilities;
- E. Complete all other items and operations necessary for installation of the new waterline.

Bid Item 6 – 8” Sleeve:

Measurement shall be per unit. Payment shall be full compensation for all labor, material, and equipment necessary to furnish and install the 8” sleeve. Payment includes the following items and tasks:

- F. Perform connection to proposed 8” C900 waterline;
- G. Perform connection to existing 8” waterline;
- H. Complete all other items and operations necessary to furnish and install the 8” sleeve.

Bid Item 7 – 8” 45 MJ:

Measurement shall be per unit. Payment shall be full compensation for all labor and equipment necessary to install the 8” 45 MJ. Payment includes the following items and tasks:

- A. Locate and protect existing utilities;
- B. Install 8” 45 MJ as shown on plans with thrust blocks per city standard;
- C. Perform connections to new 8” PVC C900 waterline;
- D. Complete all other items and operations necessary for installation of the 45 MJ.

Bid Item 8 – 12” x ¾” Saddle:

Measurement shall be per unit. Payment shall be full compensation for all labor and equipment necessary to install the 12” x ¾” Saddle. Payment includes the following items and tasks:

- A. Locate and protect existing utilities;
- B. Services complete, 12” saddle Romac 202 NS, ¾” Corp, SS inserts, meter setter with dual check, tracer wire, CTS compression coupler for connection to resident’s as needed. Long side, short side items.
- C. Perform connection to ¾” HDPE poly lateral.

Bid Item 9 – 12” x 1” Saddle:

Measurement shall be per unit. Payment shall be full compensation for all labor and equipment necessary to install the 12” x 1” Saddle. Payment includes the following items and tasks:

- A. Locate and protect existing utilities;
- B. Services complete, 12” saddle Romac 202 NS, 1” Corp, SS inserts, meter setter with dual check, tracer wire, CTS compression coupler for connection to resident’s as needed. Long side, short side items.
- C. Perform connection to 1” HDPE poly lateral.

Bid Item 10 – Valve box w/ monument & concrete collar:

Measurement shall be per unit. Payment shall be full compensation for all labor and equipment necessary to install the Valve box w/ monument & concrete collar. Payment includes the following items and tasks:

- A. Installation of empty valve box on new 8” 45 MJ;
- B. Installation of monument and concrete collar raised to grade;
- C. Complete all other items and operations necessary to furnish and install empty valve box and monument.

Bid Schedule C

Bid Item 1 – Relocate ex. Pineview irrigation 2" service to new park strip & reconnect to resident's private system:

Measurement shall be per unit. Payment shall be full compensation for all labor and equipment necessary to relocate the irrigation service and connect to existing irrigation main. Payment includes the following items and tasks:

- A. Relocation of existing irrigation service;
- B. New 2" HDPE lateral and associated connections to existing main and relocated service
- C. Connection to resident's private system;
- D. Complete all other items and operations necessary to match existing function of irrigation service.

Bid Item 2 – Relocate ex. Pineview irrigation 1" service to new park strip & reconnect to resident's private system:

Measurement shall be per unit. Payment shall be full compensation for all labor and equipment necessary to relocate the irrigation service and connect to existing irrigation main. Payment includes the following items and tasks:

- A. Relocation of existing irrigation service;
- B. New 1" HDPE lateral and associated connections to existing main and relocated service
- C. Connection to resident's private system;
- D. Complete all other items and operations necessary to match existing function of irrigation service.

Bid Item 3 – Furnish & Install 12" gate valve:

Measurement shall be per unit. Payment shall be full compensation for all labor and equipment necessary to furnish and install the 12" gate valve. Payment includes the following items and tasks:

- A. Install 12" gate valve;
- B. Perform connection to new 12" C900 DR18 waterline;
- C. adjust valve lid to final elevation with concrete rings;
- D. Install concrete collar;
- E. Complete all other items and operations necessary to install 12" gate valve.

Bid Item 4 – Furnish & Install 12” DR18 Pipe:

Measurement shall be per lineal unit. Payment shall be full compensation for all labor and equipment necessary to furnish and install the 12” DR18 pipe. Payment includes the following items and tasks:

- A. Locate and protect existing utilities;
- B. Excavate city standard trench;
- C. Remove existing irrigation pipe and dispose of in a safe and legal manner;
- D. Install sand backfill sand bedding compacted to 95% modified proctor;
- E. Install 12” DR18 pipe in locations shown on the design plans;
- F. Ensure proper slope and alignment as to avoid existing utilities;
- G. Perform connections to existing irrigation main;
- H. Complete all other items and operations necessary for installation of the new irrigation line.

ARTICLE 6 – TIME OF COMPLETION

- 6.01 Bidder agrees that the Work will be substantially complete within 60 calendar days after the date when the Contract Times commence to run as provided in Paragraph 2.03 of the General Conditions, and will be completed and ready for final payment in accordance with Paragraph 14.07 of the General Conditions within 75 calendar days after the date when the Contract Times commence to run. Anticipated NTP is May 2024. The date of substantial completion shall be no later than October 15th, 2024.
- 6.02 Bidder accepts the provisions of the Agreement as to liquidated damages.

ARTICLE 7 – ATTACHMENTS TO THIS BID

- 7.01 The following documents are submitted with and made a condition of this Bid:
 - A. Required Bid security in the form of Bid Bond or Cashier Check;
 - B. List of Proposed Subcontractors;
 - C. List of Proposed Suppliers;
 - D. List of Project References;
 - E. Evidence of authority to do business in the state of the Project; or a written covenant to obtain such license within the time for acceptance of Bids;
 - F. Contractor’s License No.: _____ *or* Evidence of Bidder’s ability to obtain a State Contractor’s License and a covenant by Bidder to obtain said license within the time for acceptance of Bids;
- 7.02 Required Bidder Qualification Statement and Choosing by Advantage (CBA) form with Supporting Data.

ARTICLE 8 – DEFINED TERMS

- 8.01 The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

ARTICLE 9 – BID SUBMITTAL

- 9.01 This Bid is submitted by:
If Bidder is:

An Individual

Name (typed or printed): _____

By: _____
(Individual's signature)

Doing business as: _____

A Partnership

Partnership Name: _____

By: _____
(Signature of general partner -- attach evidence of authority to sign)

Name (typed or printed): _____

A Corporation

Corporation Name: _____ (SEAL)

State of Incorporation: _____
Type (General Business, Professional, Service, Limited Liability): _____

By: _____
(Signature -- attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____
(CORPORATE SEAL)

Attest _____

Date of Qualification to do business in _____ is ____ / ____ / ____.

A Joint Venture

Name of Joint Venture: _____

First Joint Venturer Name: _____ (SEAL)

By: _____
(Signature of first joint venture partner -- attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____

Second Joint Venturer Name: _____(SEAL)

By: _____
(Signature of second joint venture partner -- attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____

(Each joint venturer must sign. The manner of signing for each individual, partnership, and corporation that is a party to the joint venture should be in the manner indicated above.)

Bidder's Business Address _____

Phone No. _____ Fax No. _____

E-mail _____

SUBMITTED on _____, 20____.

State Contractor License No. _____.

SECTION 00 52 00

CONSTRUCTION CONTRACT

THIS AGREEMENT is by and between NORTH OGDEN CITY (“Owner”) and
_____ (“Contractor”).

Owner and Contractor hereby agree as follows:

ARTICLE 1 - WORK

1.01 *Contractor shall complete all Work as specified or indicated in the Contract Documents.*

ARTICLE 2 - THE PROJECT

2.01 The Project for which the Work under the Contract Documents may be the whole or only a part is generally described as follows: 450 East Widening Project – Phase 2 (Project #24-131).

ARTICLE 3 - ENGINEER

3.01 The Project has been designed by ESI Engineering, Inc which is to act as Owner’s representative, assume duties and responsibilities as agreed upon, and have the rights and authority assigned to Engineer in the Contract Documents in connection with the completion of the Work in accordance with the Contract Documents.

ARTICLE 4 - CONTRACT TIMES

4.01 *Time of the Essence*

A. All time limits for Substantial Completion and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.

4.02 *Liquidated Damages*

A. Contractor and Owner recognize that time is of the essence as stated in Paragraph 4.01 above and that Owner will suffer financial loss if the Work is not completed within the times specified in Paragraph 4.02 above, plus any extensions thereof allowed in accordance with Article 12 of the General Conditions. The parties also recognize the delays, expense, and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty), Contractor shall pay Owner \$500.00 for each day that expires after the time specified in

Paragraph 4.02 above for Substantial Completion until the Work is substantially complete. After Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Time or any proper extension thereof granted by Owner, Contractor shall pay Owner \$500.00 for each day that expires after the time specified in Paragraph 4.02 above for completion and readiness for final payment until the Work is completed and ready for final payment.

ARTICLE 5 - CONTRACT PRICE

5.01 Owner shall pay Contractor for completion of the Work in accordance with the Contract Documents an amount in current funds equal to the sum of the amounts determined pursuant to Paragraphs 5.01.A, 5.01.B, and 5.01.C below:

- A. For all Unit Price Work, an amount equal to the sum of the established unit price for each separately identified item of Unit Price Work times the actual quantity of that item:

The Bid prices for Unit Price Work set forth as of the Effective Date of the Agreement are based on estimated quantities. As provided in Paragraph 11.03 of the General Conditions, estimated quantities are not guaranteed, and determinations of actual quantities and classifications are to be made by Engineer as provided in Paragraph 9.07 of the General Conditions.

ARTICLE 6 – PAYMENT PROCEDURES

6.01 *Submittal and Processing of Payments*

- A. Contractor shall submit Applications for Payment in accordance with Article 14 of the General Conditions. Applications for Payment will be processed by Engineer as provided in the General Conditions.

6.02 *Progress Payments; Retainage*

- A. Owner shall make progress payments on account of the Contract Price on the basis of Contractor's Applications for Payment on or about the last day of each month during performance of the Work as provided in Paragraph 6.02.A.1 below. All such payments will be measured by the schedule of values established as provided in Paragraph 2.07.A of the General Conditions (and in the case of Unit Price Work based on the number of units completed) or, in the event there is no schedule of values, as provided in the General Requirements.
 - 1. Prior to Substantial Completion, progress payments will be made in an amount equal to the percentage indicated below but, in each case, less the aggregate of payments previously made and less such amounts as Engineer may determine or Owner may withhold, including

but not limited to liquidated damages, in accordance with Paragraph 14.02 of the General Conditions.

- a. 95 percent of Work completed (with the balance being retainage). If the Work has been 50 percent completed as determined by Engineer, and if the character and progress of the Work have been satisfactory to Owner and Engineer, then as long as the character and progress of the Work remain satisfactory to Owner and Engineer, there will be no additional retainage; and
 - b. 25 percent of cost of materials and equipment not incorporated in the Work (with the balance being retainage).
- B. Upon Substantial Completion, Owner shall pay an amount sufficient to increase total payments to Contractor to 100 percent of the Work completed, less such amounts as Engineer shall determine in accordance with Paragraph 14.02.B.5 of the General Conditions and less 100 percent of Engineer's estimate of the value of Work to be completed or corrected as shown on the tentative list of items to be completed or corrected attached to the certificate of Substantial Completion.

6.03 *Final Payment*

- A. Upon final completion and acceptance of the Work in accordance with Paragraph 14.07 of the General Conditions, Owner shall pay the remainder of the Contract Price as recommended by Engineer as provided in said Paragraph 14.07.

ARTICLE 7 – INTEREST

- 7.01 All moneys not paid when due as provided in Article 14 of the General Conditions shall bear interest at the rate of 0 percent per annum.

ARTICLE 8 – CONTRACTOR'S REPRESENTATIONS

- 8.01 In order to induce Owner to enter into this Agreement, Contractor makes the following representations:
- A. Contractor has examined and carefully studied the Contract Documents and the other related data identified in the Bidding Documents.
 - B. Contractor has visited the Site and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
 - C. Contractor is familiar with and is satisfied as to all federal, state, and local Laws and Regulations that may affect cost, progress, and performance of the Work.
 - D. Contractor has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities), if any, that have been identified in Paragraph SC-4.02 of the Supplementary Conditions as containing

reliable "technical data," and (2) reports and drawings of Hazardous Environmental Conditions, if any, at the Site that have been identified in Paragraph SC-4.06 of the Supplementary Conditions as containing reliable "technical data."

- E. Contractor has considered the information known to Contractor; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Contract Documents; and the Site-related reports and drawings identified in the Contract Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, including any specific means, methods, techniques, sequences, and procedures of construction expressly required by the Contract Documents; and (3) Contractor's safety precautions and programs.
- F. Based on the information and observations referred to in Paragraph 8.01.E above, Contractor does not consider that further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract Documents.
- G. Contractor is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.
- H. Contractor has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
- I. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

ARTICLE 9 – CONTRACT DOCUMENTS

9.01 *Contents*

- A. The Contract Documents consist of the following:
 - 1. This Agreement.
 - 2. Performance bond.
 - 3. Payment bond.
 - 4. Other bonds as required.
 - 5. General Conditions.
 - 6. Supplementary Conditions.
 - 7. Specifications as listed in the table of contents of the Project Manual.

8. Drawings
9. Addenda.
10. Exhibits to this Agreement:
 - a. Contractor's Bid.
 - b. Documentation submitted by Contractor prior to Notice of Award.
11. The following which may be delivered or issued on or after the Effective Date of the Agreement and are not attached hereto:
 - a. Notice to Proceed.
 - b. Work Change Directives.
 - c. Change Orders.
- B. The documents listed in Paragraph 9.01.A are attached to this Agreement (except as expressly noted otherwise above).
- C. There are no Contract Documents other than those listed above in this Article 9.
- D. The Contract Documents may only be amended, modified, or supplemented as provided in Paragraph 3.04 of the General Conditions.

ARTICLE 10 – MISCELLANEOUS

10.01 *Terms*

- A. Terms used in this Agreement will have the meanings stated in the General Conditions and the Supplementary Conditions.

10.02 *Assignment of Contract*

- A. No assignment by a party hereto of any rights under or interests in the Contract will be binding on another party hereto without the written consent of the party sought to be bound; and, specifically but without limitation, moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

10.03 *Successors and Assigns*

- A. Owner and Contractor each binds itself, its partners, successors, assigns, and legal representatives to the other party hereto, its partners, successors, assigns, and legal

representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

10.04 Severability

- A. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon Owner and Contractor, who agree that the Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

10.05 Contractor’s Certifications

Contractor certifies that it has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing the Contract. For the purposes of this Paragraph 10.05:

- 1. “corrupt practice” means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the bidding process or in the Contract execution;
- 2. “fraudulent practice” means an intentional misrepresentation of facts made (a) to influence the bidding process or the execution of the Contract to the detriment of Owner, (b) to establish Bid or Contract prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
- 3. “collusive practice” means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish Bid prices at artificial, non-competitive levels; and
- 4. “coercive practice” means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

IN WITNESS WHEREOF, Owner and Contractor have signed this Agreement. Counterparts have been delivered to Owner and Contractor. All portions of the Contract Documents have been signed or have been identified by Owner and Contractor or on their behalf.

This Agreement will be effective on _____, 2024 (which is the Effective Date of the Agreement).

OWNER:

CONTRACTOR

NORTH OGDEN CITY _____

By: _____

By: _____

Title: _____

Title: _____

(If Contractor is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.)

Attest
· _____

Attest: _____

Title: _____

Title: _____

Address for giving notices:

Address for giving notices:

License No.: _____

(If Owner is a corporation, attach evidence of authority to sign. If Owner is a public body, attach evidence of authority to sign and resolution or other documents authorizing execution of this Agreement.)

Agent for service of process:

SECTION 00 43 13

BID SECURITY



ESI Engineering, Inc.	Project	North Ogden City		Sheet No.
4141 W 2100 S Suite 100		450 East Widening Project Phase 2		1 of 3
Salt Lake City, Utah	Owner	North Ogden City		
Phone (801) 263-1752	Estimated by:	MDF	Date: 1/15/25	Project No.
Fax (801) 263-1780	Checked by:	BFC	Date: 1/15/25	24-131

Consulting Engineers & Land Surveyors

Bid Schedule A - Roadway

Item	Description	Total Amount	Units	Unit Price	Total
1	Mobilization	1	LS		
2	Traffic Control	1	LS		
3	Survey Construction Staking	1	LS		
4	Pothole existing utility as needed	3	EA		
5	Remove concrete curb and gutter	1600	FT		
6	Remove concrete sidewalk	295	SQ YD		
7	Remove concrete driveway	620	SQ YD		
8	Remove asphalt pavement	9880	SQ YD		
9	Remove tree	41	EA		
10	Remove catch basin	7	EA		
11	Reconstruct catch basin	2	EA		
12	Relocate irrigation junction box	3	EA		
13	Relocate irrigation valve	2	EA		
14	Remove pipe	170	FT		
15	Roadway excavation (Plan Quantity)	3200	CY		
16	Borrow soft spot repair	495	CY		
17	Catch Basin	1	EA		
18	Double Catch Basin	2	EA		
19	18" RCP Storm drain Pipe	135	FT		
20	24" RCP Storm drain Pipe	66	FT		
21	4" Sewer lateral w/ tracer wire	450	FT		
22	Connect new 4" sewer lateral to existing wye	6	EA		
23	Borrow (Plan Quantity)	1060	CY		
24	Untreated base course (Plan Quantity)	2390	CY		
25	HMA - 1/2 inch	3700	TN		
26	Concrete curb and gutter	1525	FT		
27	Concrete waterway	280	SQ FT		
28	Concrete sidewalk	5250	SQ FT		
29	Concrete Driveway, flared, 6 inch thick	400	SQ FT		
30	Pedestrian access ramp	8	EA		
31	Reconstruct manhole	14	EA		
32	Reconstruct valve	12	EA		
33	Relocate sign	3	EA		
34	New sign, post, and base	2	EA		
35	Mailbox assembly	4	EA		
36	Decorative landscape - parkstrip	4820	SQ FT		
37	450 East & 3100 North Traffic Signal	1	LS		
38	ITS System	1	LS		
39	Striping as shown on plan sheets	1	LS		
40	Re-establish existing landscape and pressurized irrigation system	1	LS		
41	Remove existing water meter	9	EA		
42	Relocate existing fire hydrant	4	EA		
43	Water meter	6	EA		
44	6" Gate valve	1	EA		

Item	Description	Total Amount	Units	Unit Price	Total
45	1" HDPE poly lateral	550	LF		
46	6" 45° MJ	2	EA		
47	12" 45° MJ	2	EA		
48	6" C900 PVC water line	250	LF		
49	¾"x1" Corp Stop	6	EA		
50	Grounding clamp	6	EA		
	Subtotal (Items 1-50)				



ESI Engineering, Inc.	Project	North Ogden City		Sheet No.
4141 W 2100 S Suite 100		450 East Widening Project Phase 2		2 of 3
Salt Lake City, Utah	Owner	North Ogden City		
Phone (801) 263-1752	Estimated by:	MDF	Date:	1/15/25
Fax (801) 263-1780	Checked by:	BFC	Date:	1/15/25
				Project No. 24-131

Consulting Engineers & Land Surveyors

Bid Schedule B - Waterline

Item	Description	Total Amount	Units	Unit Price	Total
1	New fire hydrant assembly	1	EA		
2	¾" HDPE poly lateral	150	FT		
3	12" C900 DR14 waterline	400	FT		
4	12"x8" Reducer	1	EA		
5	8" C900 PVC waterline	40	FT		
6	8" Sleeve or Alpha	2	EA		
7	8" 45° MJ	2	EA		
8	12" x ¾" Saddle	3	EA		
9	12" x 1" Saddle	4	EA		
10	Valve box w/ monument & concrete collar	1	EA		
Subtotal (Items 1-10)					



ESI Engineering, Inc.	Project	North Ogden City		Sheet No.
4141 W 2100 S Suite 100		450 East Widening Project Phase 2		3 of 3
Salt Lake City, Utah	Owner	North Ogden City		
Phone (801) 263-1752	Estimated by:	MDF	Date: 1/15/26	Project No.
Fax (801) 263-1780	Checked by:	BFC	Date: 1/15/26	24-131

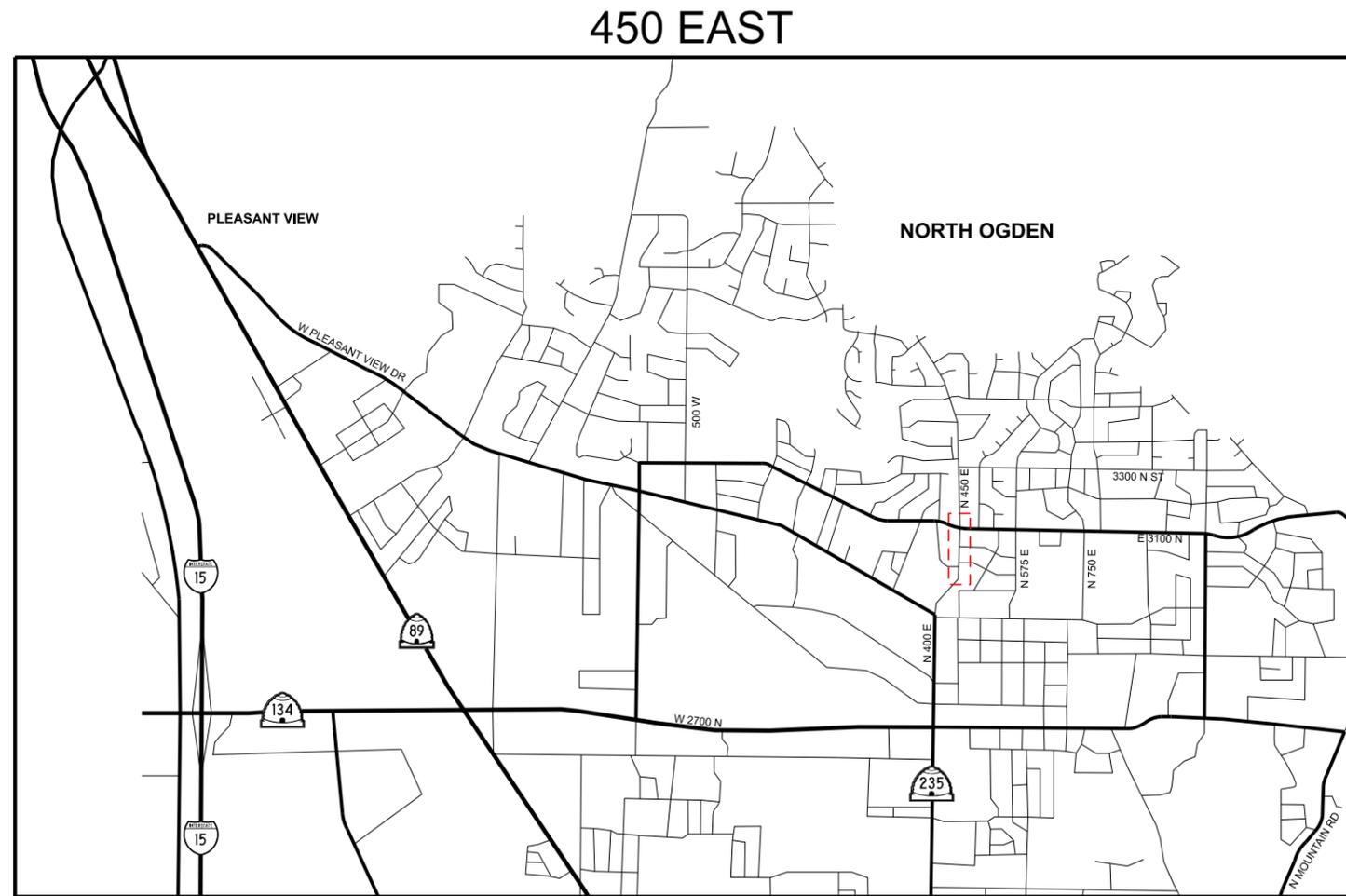
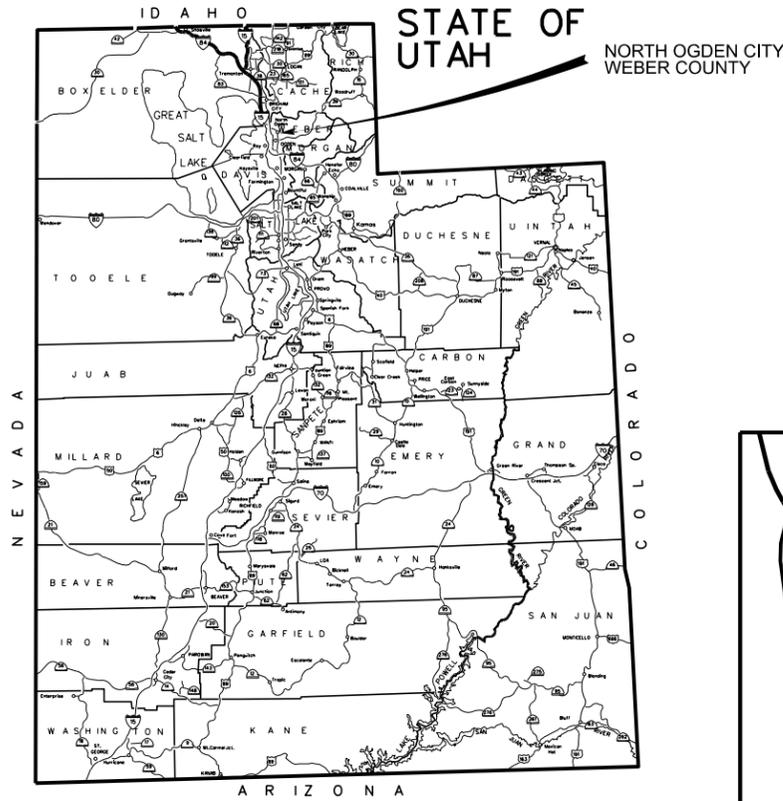
Consulting Engineers & Land Surveyors

Bid Schedule C - Pineview Irrigation

Item	Description	Total Amount	Units	Unit Price	Total
1	Relocate ex. Pineview irrigation 2" service to new park strip & reconnect to resident's private system	1	EA		
2	Relocate ex. Pineview irrigation 1" service to new park strip & reconnect to resident's private system	2	EA		
3	Furnish & Install 12" gate valve	1	EA		
4	Furnish & Install 12" DR18 Pipe	135	LF		
Subtotal (Items 1-4)					

NORTH OGDEN CITY

450 EAST WIDENING PROJECT PHASE 2



 PROJECT LOCATION

SHEET INDEX		
SHEET NO.	SHEET TYPE	SHEET TITLE
1	-	TITLE SHEET
2	G-01	NOTES & CONTACTS
3	G-02	LEGEND
4	CR-01	CROSS REFERENCE
5	TS-01	TYPICAL SECTION
6-8	RD-01 - RD-03	ROADWAY & GRADING
9-11	UT-01 - UT-03	REMOVAL & UTILITY
12-14	SS-01 - SS-03	SIGNING & STRIPING
15-16	SG-01 TO SG-02	SIGNAL PLAN
17-18	SG-S01 TO SG-S02	SIGNAL SCHEDULE
19-20	ITS-01 TO ITS-02	ITS
21	ITS-S01	ITS SCHEDULE
22-28	DT-01 TO DT-07	STANDARD DETAILS
29-40	SGDT-01 TO SGDT-12	SIGNAL DETAILS

ESI ENGINEERING
CONSULTING ENGINEERS AND LAND SURVEYORS
4141 W 2100 S SUITE 100
WEST VALLEY CITY, UTAH 84120
TEL: (801) 263-1752

DESIGN: <u>MDF</u>	CHECK: <u>BFC</u>
DRAWN: <u>MDF</u>	CHECK: <u>BFC</u>
QUANT: <u>MDF</u>	CHECK: <u>BFC</u>

APPROVED _____	DATE _____	CITY ENGINEER _____
PROJECT NUMBER	24-131	SHEET 1 OF 40



NO	BY	DATE	REMARKS
REVISIONS			

GENERAL

1. ALL CONSTRUCTION SHALL COMPLY WITH THE STANDARD DRAWINGS AND SPECIFICATIONS OF NORTH OGDEN CITY UNLESS OTHERWISE NOTED.
2. EXISTING UTILITY LOCATIONS SHOWN MAY NOT BE EXACT AND ALL UTILITIES MAY NOT BE SHOWN. CONTACT BLUE STAKES, SEWER DISTRICT, IRRIGATION COMPANY & ANY OTHER REQUIRED UTILITY COMPANY PRIOR TO EXCAVATION.
3. THE CONTRACTOR SHALL HAVE ON SITE AT ALL TIMES AT LEAST ONE COPY OF THE SIGNED APPROVED PLANS & SPECIFICATIONS, AS WELL AS ALL PERMITS AS REQUIRED TO PERFORM THE WORK.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING A TRAFFIC CONTROL PLAN & PROVIDING ALL TRAFFIC CONTROL DEVICES AS MAY BE REQUIRED FOR CONSTRUCTION, INCLUDING FLAGGING. TRAFFIC CONTROL PLANS SHALL BE REVIEWED AND ACCEPTED BY NORTH OGDEN CITY. ALL TRAFFIC SHALL CONFIRM TO THE MOST RECENT VERSION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND CITY STANDARDS.
5. UTILITY TRENCHES ARE TO BE SLOPED OR BRACED & SHEETED AS PER STATE & FEDERAL REQUIREMENTS FOR SAFETY & PROTECTION OF WORKERS & OTHER UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR ALL PROJECT SAFETY, INCLUDING BUT NOT LIMITED TO: EXCAVATION & SHORING, TRAFFIC CONTROL & SECURITY.
6. THE CONTRACTOR IS RESPONSIBLE TO COORDINATE & COOPERATE WITH ALL UTILITY COMPANIES WITH REGARD TO RELOCATIONS OR ADJUSTMENTS OF EXISTING UTILITIES DURING CONSTRUCTION TO ASSURE THAT THE WORK IS ACCOMPLISHED IN A TIMELY MANNER & WITH MINIMUM DISRUPTION OF SERVICE.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RECORD DRAWING INFORMATION & SUBMIT TO THE ENGINEER PRIOR TO FINAL PAYMENT.
8. CONTRACTOR SHALL PROTECT & NOT DISTURB PROPERTY ADJACENT TO PROJECT I.E. FENCE, LANDSCAPING, MAILBOXES, ETC. ANY DAMAGE TO PUBLIC OR PRIVATE PROPERTY BY CONTRACTOR SHALL BE RESTORED TO EQUAL CONDITION AT CONTRACTORS EXPENSE.
9. EXISTING DRAINS FROM ADJACENT PROPERTIES ARE TO BE MAINTAINED AND PROTECTED.
10. THE CONTRACTOR(S) SHALL REMOVE ALL OBSTRUCTIONS, BOTH ABOVE AND BELOW GROUND, AS REQUIRED FOR THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS. THIS SHALL INCLUDE CLEARING AND GRUBBING WHICH CONSISTS OF CLEARING THE GROUND SURFACE OF ALL TREES, STUMPS, BRUSH, UNDERGROWTH, HEDGES, HEAVY MATERIAL WHICH IN THE OPINION OF THE ENGINEER, IS SUITABLE FOR THE FOUNDATION OF PAVEMENTS OR CONCRETE. ALL MATERIAL NOT SUITABLE FOR FUTURE USE ON SITE SHALL BE DISPOSED OF OFF SITE.
11. ALL MATERIALS TO BE REMOVED SHALL BE HAULED AWAY & DISPOSED OF IN A SAFE & LEGAL MANNER BY THE CONTRACTOR.
12. CONTRACTOR IS RESPONSIBLE FOR DEWATERING AND DIVERSION OF GROUND WATER AS NECESSARY TO COMPLETE WORK.
13. THE CONTRACTOR SHALL EXAMINE THE DRAWING AND SHALL NOTIFY THE OWNER OF ANY DISCREPANCIES OR CONFLICTS BEFORE PROCEEDING WITH THE WORK.
14. THE CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS AT THE SITE AND SHALL NOTIFY THE ENGINEER OF DISCREPANCIES BETWEEN THE ACTUAL CONDITIONS AND INFORMATION SHOWN ON THE DRAWINGS BEFORE PROCEEDING WITH THE WORK.
15. PROPERTY IMPACTED BY PROJECT SHALL BE RESTORED TO EQUAL CONDITION, MATCHING EXISTING MATERIALS. REPLACING SPRINKLERS, DECORATIVE CURBING, ETC AS PER CITY.
16. NEW UTILITY ALIGNMENTS SHALL BE ESTABLISHED IN THE FIELD ACCORDING TO POT HOLE FINDINGS OF EX. UTILITY LINES. ENGINEER TO VERIFY NEW UTILITY ALIGNMENT, PRIOR TO MILLING OR SAW-CUTTING OF ASPHALT.
17. THE CONTRACTOR IS REQUIRED TO CONTACT THE ENGINEER AT LEAST 24 HOURS PRIOR TO STARTING CONSTRUCTION.

PROJECT SPECIFICATIONS AND STANDARDS

1. NORTH OGDEN CITY STANDARDS & SPECIFICATIONS LATEST EDITION
2. APWA STANDARDS AND SPECIFICATIONS LATEST EDITION

UTILITY CONTACTS

NATURAL GAS

DOMINION ENERGY
SL MAPPING DEPARTMENT
(801) 324-3970

INTERNET

LUMEN / CENTURY LINK
JAMES CHIDESTER
(385) 479-7345

IRRIGATION

PINEVIEW WATER SYSTEMS
DOUG JEPPESEN
(801) 622-4351

WATER

NORTH OGDEN CITY
JASON RENEY
(801) 782-8111

POWER

ROCKY MOUNTAIN POWER - OGDEN
KEVIN HILL
(801) 886-7007

INTERNET

COMCAST
ANNETTE HARM
(514) 644-2333

COMMUNICATION

ALLWEST COMMUNICATIONS
JEFF ANDERSON
(435) 783-4994

SEWER

NORTH OGDEN CITY
TRENT WILKINS
(801) 782-8111



CAUTION: NOTICE TO CONTRACTOR

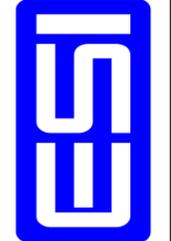
THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS ARE BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE LOCAL UTILITY LOCATION CENTER AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF THE UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS. IF A CONFLICT IS IDENTIFIED, THE ENGINEER OF RECORD SHOULD BE CONTACTED IMMEDIATELY, PRIOR TO ANY FURTHER WORK BEING DONE RELATED TO THE ISSUE.

REVISIONS	NO.	DATE	APPROVED BY	REMARKS



10/17/2025 DATE	MDF	BFC
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ESI ENGINEERING, INC.
CONSULTING ENGINEERS
AND LAND SURVEYORS
4141 W 2100 S, SUITE 100
SALT LAKE CITY, UTAH 84120
TEL. 801.263.1752 FAX 801.263.1780



NORTH OGDEN CITY
450 EAST WIDENING
PROJECT PHASE 2
NOTES & CONTACTS

SHEET NO.	2
SHEET TYP.	G-01
PROJ. NO.	24-131

ABBREVIATIONS

°	DEGREES
'	MINUTES, FEET
"	SECONDS, INCHES
ADA	AMERICAN DISABILITIES ACT
ARCH	ARCHITECT, ARCHITECTURAL
BH	BORE HOLE
BLDG	BUILDING POINT
BM	BENCHMARK
BOB	BOTTOM OF BANK
BOW	BOTTOM OF WALL
BOXCULV	BOX CULVERT
BS	BLUE STAKE
BW	BROKEN WHITE STRIPE
CB	CATCH BASIN
CG	CURB AND GUTTER
CL	CENTERLINE
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
COB	CLEANOUT BOX
COMBO	COMBINATION (BOX)
CONC	CONCRETE
CPP	CORRUGATED PLASTIC PIPE
CWP	CURB WALL
DA	DRIVE APPROACH
DIA	DIAMETER
DRIVE	DRIVEWAY
DW	DOUBLE WHITE STRIP
DY	DOUBLE YELLOW STRIPE
E	ELECTRICITY, ELECTRICAL
EB	ELECTRICAL BOX
EBL	EAST BOUND LANE
ECB	ELECTRIC CONTROL BOX
EG	EXISTING GRADE
ELEC	ELECTRICAL
EOA	EDGE OF ASPHALT
EOB	EDGE OF BRUSH
ECC	EDGE OF CONCRETE
EOG	EDGE OF GRASS
EOGR	EDGE OF GRAVEL
EOL	EDGE OF LANE
EOW	EDGE OF WALK
EX	EXISTING
FG	FINISH GRADE
FH	FIRE HYDRANT
FL	FLOWLINE
FNC	FENCE
FT	FEET
GAS	GAS, NATURAL GAS
GB	GRADE BREAK
GR	GUARD RAIL
GV	GAS VALVE
HDPE	HIGH-DENSITY POLYETHYLENE PIPE
H2O	WATER
IE	INVERT ELEVATION
IR	IRRIGATION
IRRBOX	IRRIGATION (SPRINKLER) BOX
IRRLV	IRRIGATION VALVE
L	LENGTH
LIP	LIP OF GUTTER
LF	LINEAL FEET
LP	LIGHT POLE
MH	MANHOLE
MHGAS	NATURAL GAS MANHOLE
MHSD	STORM DRAIN MANHOLE
MHSS	SANITARY SEWER MANHOLE
MHTELE	TELEPHONE MANHOLE
MHWTR	WATER MANHOLE
MON	MONUMENT
NBL	NORTHBOUND LANE
NG	NATURAL GROUND
NOTE	NOTE TO FOLLOW (ATTRIBUTE)
PC	CONTROL CODE: STARTS A TANGENTIAL CURVE
PCC	POINT OF COMPOUND CURVATURE
PI	POINT OF INTERSECTION
PL	PROPERTY LINE
PP	POWER POLE
POC	POINT OF CONNECTION
PROP	PROPERTY
PT	CONTROL CODE: ENDS A TANGENTIAL CURVE
R	RADIUS
RAMP	FREEWAY ON/OFF RAMP
RC	REBAR & CAP
RCP	REINFORCED CONCRETE PIPE
RMP	ROCKY MOUNTAIN POWER
ROW	RIGHT OF WAY
RW	RETAINING WALL
RWM	RIGHT OF WAY MARKER
SD	STORM DRAIN
SEC	SECTION
SF	SQUARE FEET
SPEC	SPECIFICATION
SPECS	SPECIFICATIONS
SS	SANITARY SEWER
STD	STANDARD
SW	SOLID WHITE STRIPE
SY	SOLID YELLOW STRIPE
TBC	TOP BACK OF CURB
TBS	TOP BACK OF SIDEWALK
TBW	TOP BACK OF WATER WAY
TELE	TELEPHONE
TFS	TOP FRONT OF SIDEWALK
TL	TRAVEL LANE
TOA	TOP OF ASPHALT
TOB	TOP OF BANK
TOC	TOP OF CONCRETE
TOE	BREAKLINE
TOR	TOP OF RAIL
TOW	TOP OF WALL
TYP	(TYPICAL) REPRESENTATIVE OF ALL SIMILARLY NOTED ITEMS
UTIL	UTILITY
UP	UTILITY POLE
W	WATER
WALK	SIDEWALK
WG	WALK & GUTTER (CONCRETE POURED AS ONE UNIT)
WM	WATER METER
WV	WATER VALVE

SIGNAL SYMBOLS

	DUAL MAST ARM SIGNAL POLE
	MAST ARM SIGNAL POLE
	SIGNAL POLE LUMINAIRE EXTENSION WITH ARM
	SIGNAL POLE LUMINAIRE EXTENSION WITH VERTICAL ATTACHMENT
	MAST ARM MOUNTED SIGN
	POWER SOURCE
	TRAFFIC SIGNAL POLE
	TYPE 0 - 1 SECTION SIGNAL HEAD ASSEMBLY
	TYPE I - 3 SECTION SIGNAL HEAD ASSEMBLY
	TYPE II - 3 SECTION SIGNAL HEAD ASSEMBLY
	TYPE III - 3 SECTION (ALL AROWS) SIGNAL HEAD ASSEMBLY
	TYPE IV - 4 SECTION SIGNAL HEAD ASSEMBLY
	TYPE V - 5 SECTION SIGNAL HEAD ASSEMBLY
	TYPE VI - 4 SECTION (ALL ARROWS) SIGNAL HEAD ASSEMBLY
	TYPE VII - 4 SECTION SIGNAL HEAD ASSEMBLY
	PEDESTRIAN HYBRID BEACON - 3 SECTION SIGNAL HEAD ASSEMBLY
	VIBRATION MITIGATOR
	TRAFFIC SIGNAL CONTROLLER CABINET
	TYPE A JUNCTION BOX
	TYPE B JUNCTION BOX
	TYPE C JUNCTION BOX
	TYPE III JUNCTION BOX (ATMS)
	SAME JUNCTION BOX USED FOR SIGNAL CIRCUIT
	PEDESTRIAN SIGNAL HEAD WITH PUSH BUTTON
	AUDIBLE PEDESTRIAN SIGNAL HEAD
	PUSH BUTTON
	UNDERGROUND SERVICE PEDESTAL (USP)
	PREEMPTION CONTROL SYSTEM DETECTOR
	DIRECTIONAL ANTENNA
	VIDEO DETECTION CAMERA
	CCTV CAMERA
	RADAR DETECTION, DILEMMA ZONE
	RADAR DETECTION, STOP BAR

STANDARD SYMBOLS

EXISTING/PROPOSED	
	FIRE HYDRANT
	WATER METER
	CULINARY WATER VALVE
	IRRIGATION VALVE
	IRRIGATION JUNCTION BOX/ METER BOX
	CATCH BASIN
	STORM DRAIN MANHOLE
	SANITARY SEWER MANHOLE
	TELECOMM. JUNCTION BOX
	TV/PHONE PEDESTAL
	ELECTRICAL POLE
	LIGHT POLE
	ELECTRICAL BOX
	GUY WIRE
	GAS METER
	GAS VALVE
	MAILBOX
	SURVEY MONUMENT
	TEE
	90° BEND
	45° BEND
	22.5° BEND
	11.25° BEND
	THRUST BLOCK

UTILITIES

EXISTING		PROPOSED		
	swr	SANITARY SEWER		SWR
	sd	STORM DRAIN		SD
	wtr	CULINARY WATER		WTR
	ir	IRRIGATION WATER		IR
	g	GAS		G
	be	ELECTRICAL BELOW		BE
	e	ELECTRICAL OVERHEAD		E
	fo	INTERNET		FO
	btel	COMMUNICATIONS BELOW		BTel
	tel	COMMUNICATIONS OVERHEAD		TEL

SURFACE FEATURES

EXISTING/PROPOSED	
	WOOD FENCE
	CHAINLINK/WIRE FENCE
	INTERMEDIATE CONTOUR
	MAJOR CONTOUR
	BREAKLINE
	CURB & GUTTER
	TOP OF DITCH
	FLOW LINE
	CONCRETE

ROW

EXISTING/PROPOSED		
	rl	PROPERTY LINE
	1/4	QUARTER CORNER SECTION LINE
		BOUNDARY LINE
		TOWNSHIP LINE
	SEC	SECTION LINE
	pe	UTILITY EASEMENT

NO.	DATE	APPROVED BY	REMARKS



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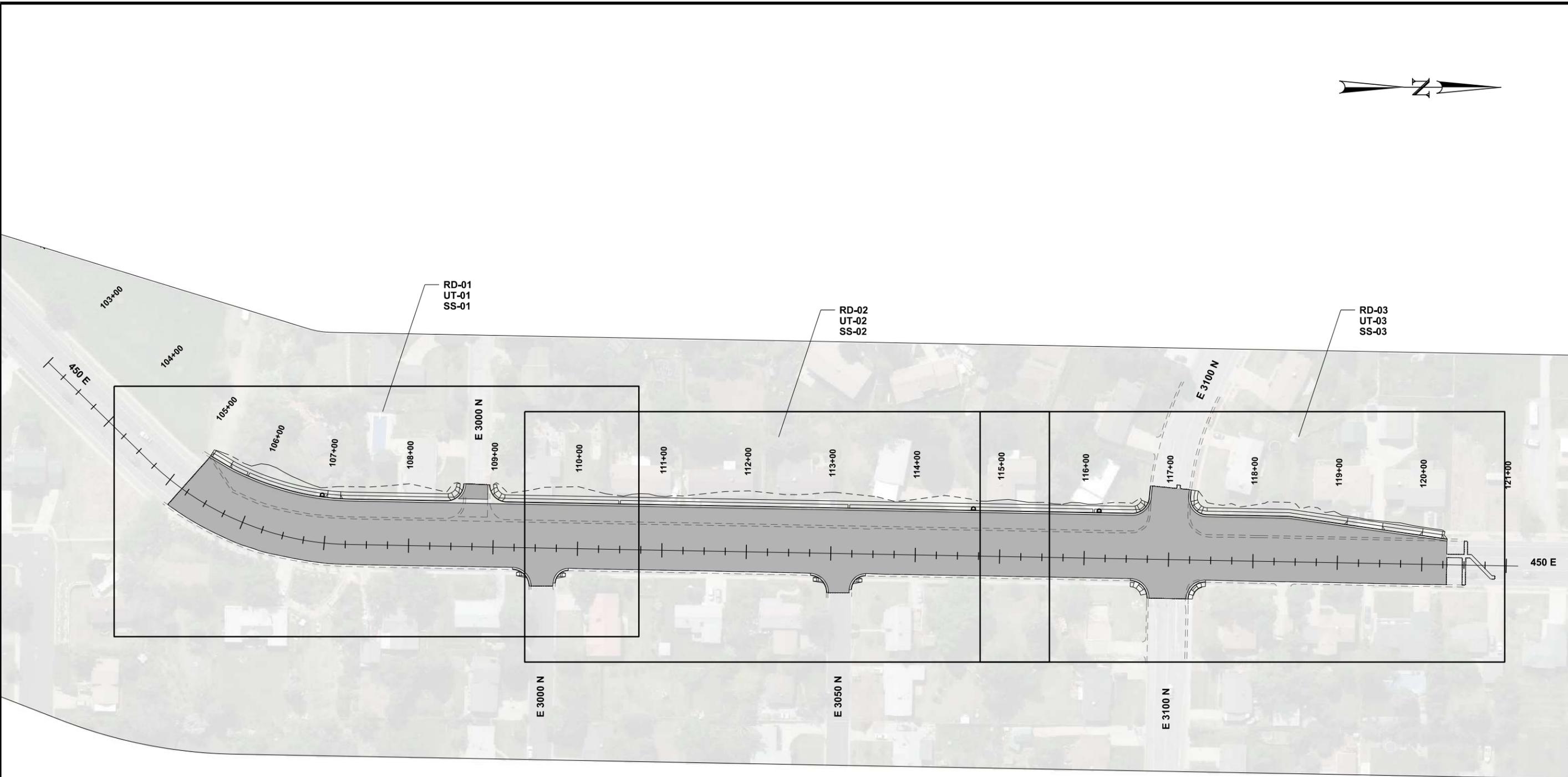


NORTH OGDEN CITY
450 EAST WIDENING
PROJECT PHASE 2
LEGEND & ABBREVIATIONS

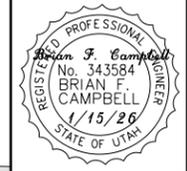
SHEET NO. **3**

SHEET TYP. **G-02**

PROJ. NO. **24-131**



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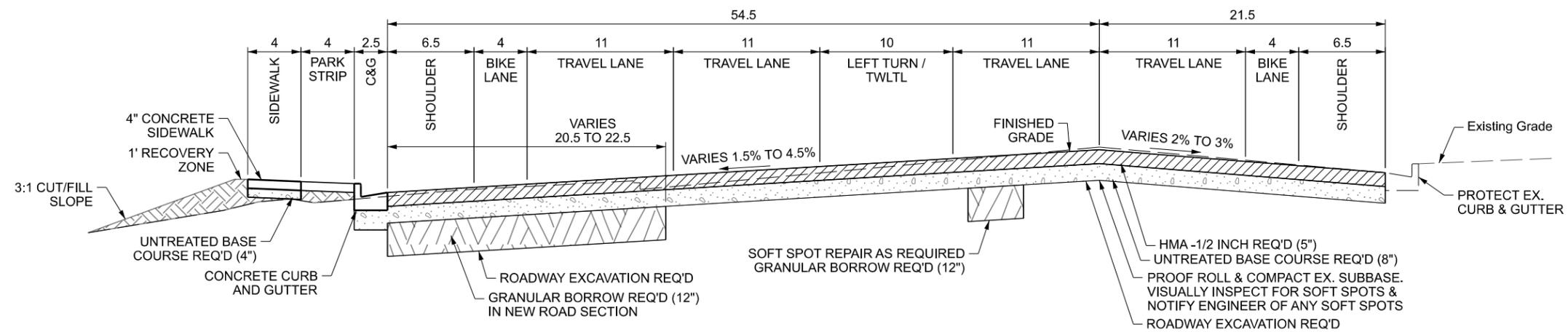
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NORTH OGDEN CITY
 450 EAST WIDENING
 PROJECT PHASE 2
CROSS REFERENCE

SHEET NO.	4
SHEET TYP.	CR-01
PROJ. NO.	24-131

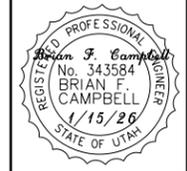


TYPICAL SECTION

450 EAST

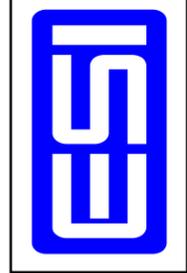
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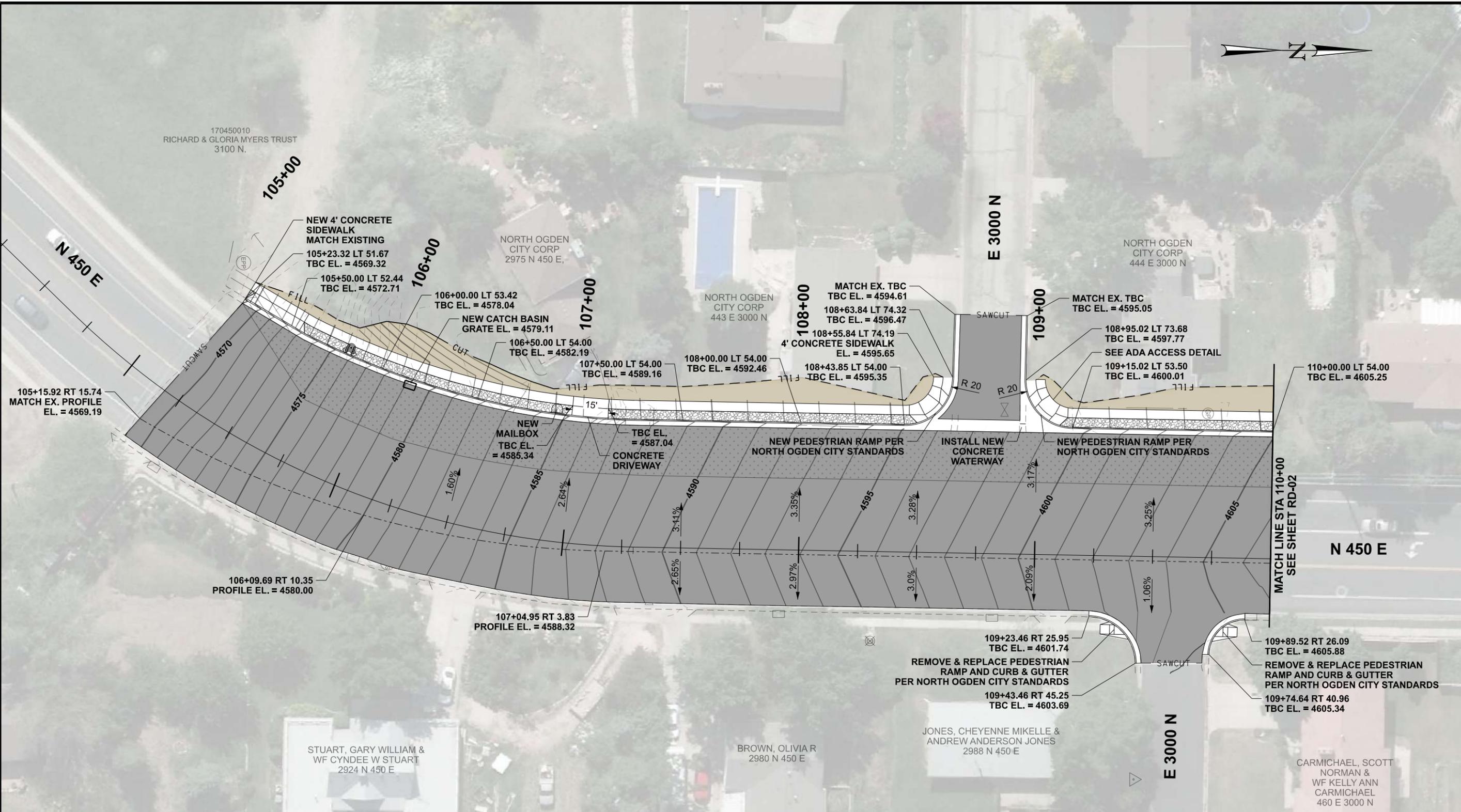


NORTH OGDEN CITY
 450 EAST WIDENING
 PROJECT PHASE 2
TYPICAL SECTION

SHEET NO. 5

SHEET TYP. TS-01

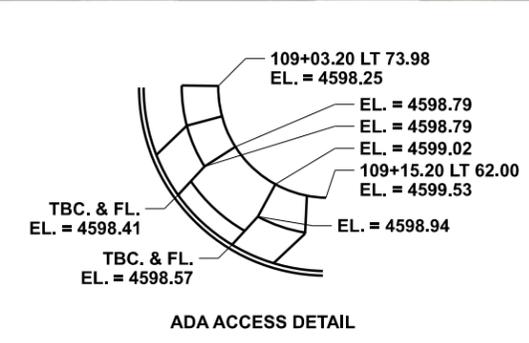
PROJ. NO. 24-131



LEGEND & NOTES

- CUT & FILL AT 3:1 SLOPE BEHIND BACK OF WALK TO MATCH EX. GRADE

	ROADWAY RECONSTRUCTION 5" HMA 8" UNTREATED BASE COURSE
	INSTALL 2"- LANDSCAPE ROCK IN PARK STRIP
	ROADWAY RECONSTRUCTION 5" HMA 8" UNTREATED BASE COURSE 12" GRANULAR BORROW



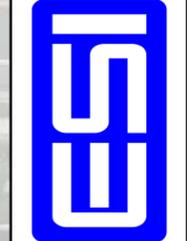
REVISIONS

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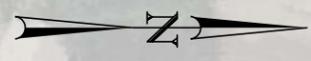
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NORTH OGDEN CITY 450 EAST WIDENING PROJECT PHASE 2	ROADWAY & GRADING
SHEET NO. 6	SHEET TYP. RD-01
PROJ. NO. 24-131	



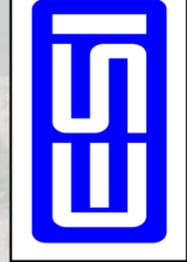


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	CHECKED BY	BFC

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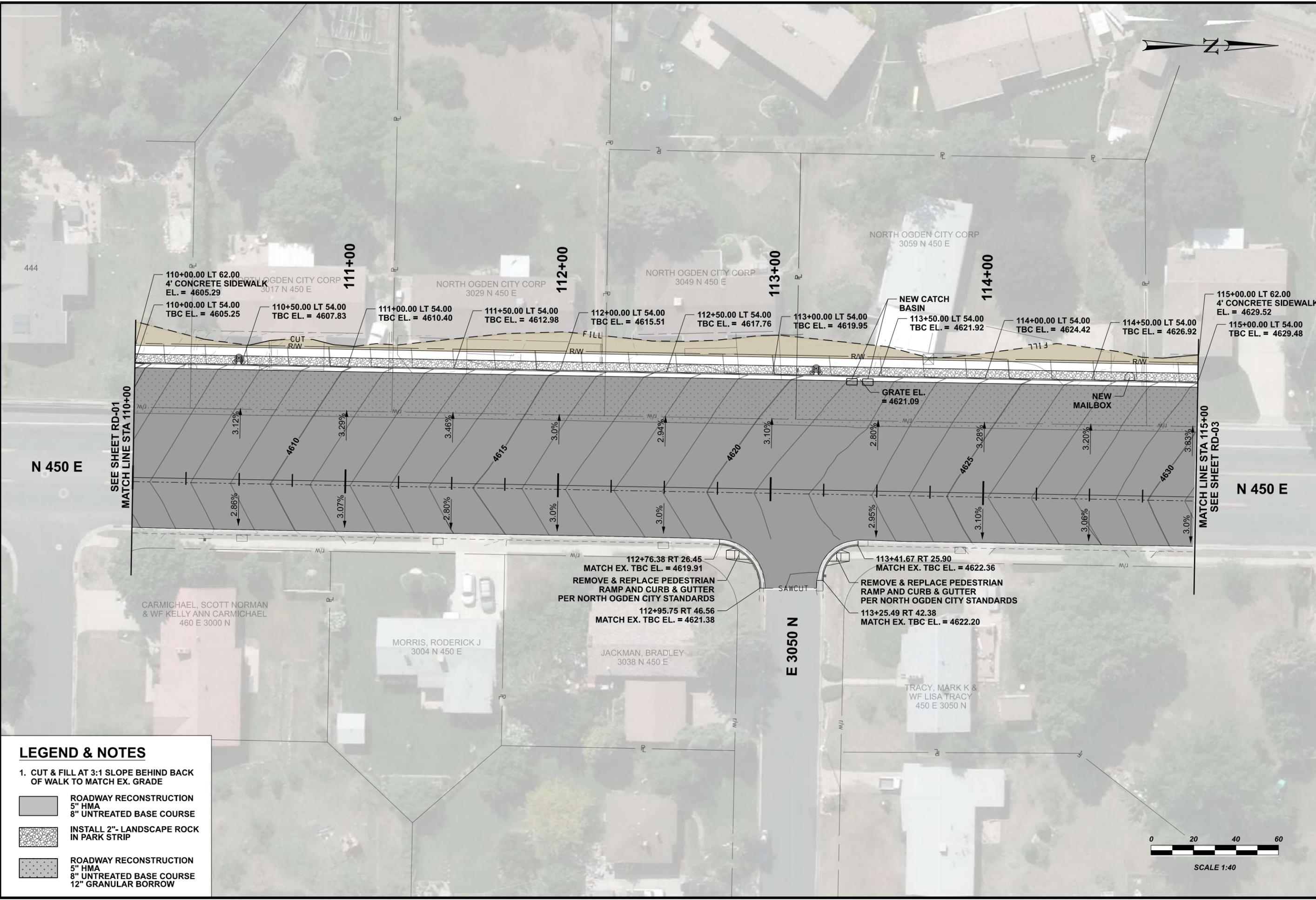


NORTH OGDEN CITY
 450 EAST WIDENING
 PROJECT PHASE 2
ROADWAY & GRADING

SHEET NO. 7

SHEET TYP. RD-02

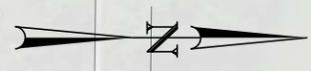
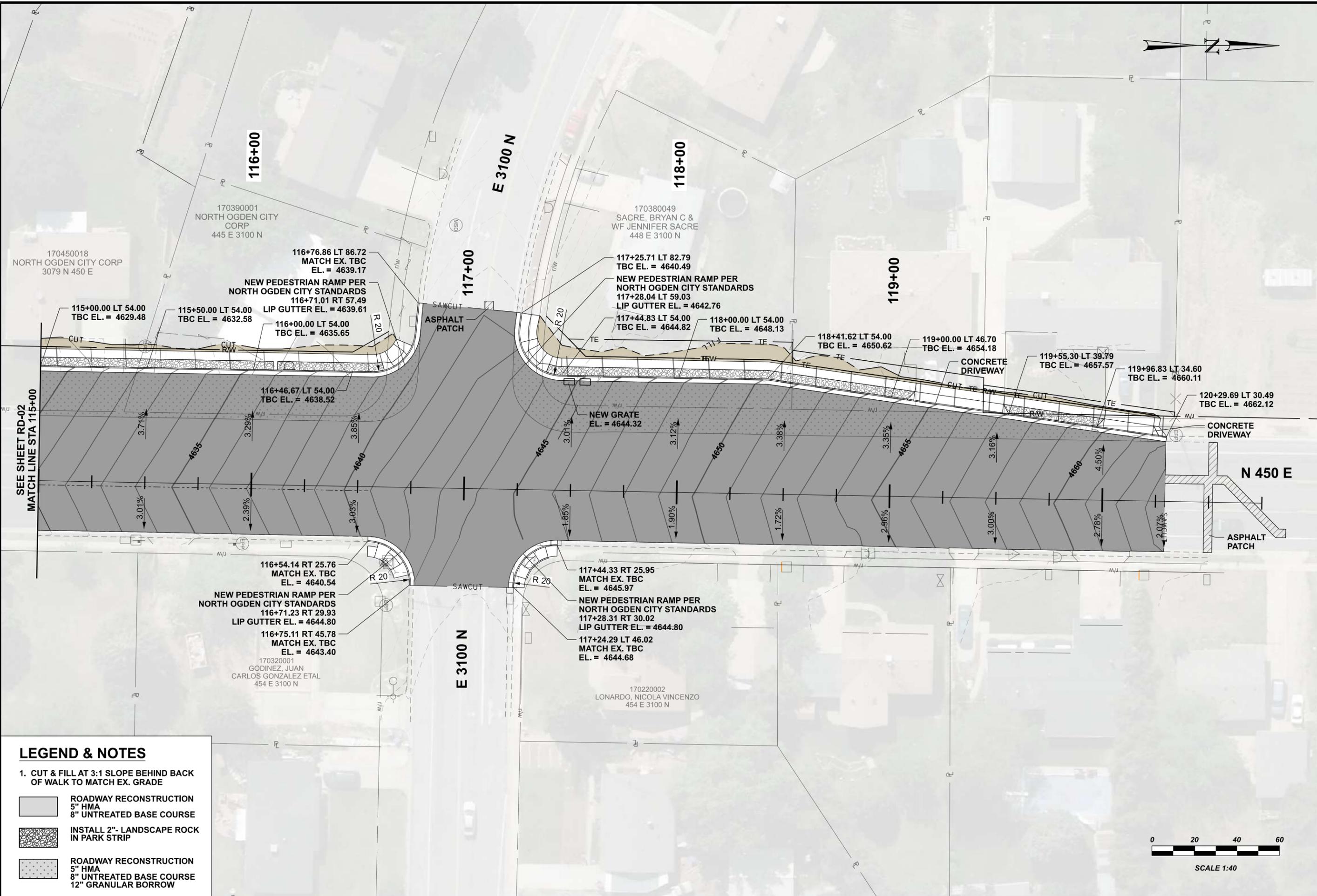
PROJ. NO. 24-131



LEGEND & NOTES

- CUT & FILL AT 3:1 SLOPE BEHIND BACK OF WALK TO MATCH EX. GRADE
- ROADWAY RECONSTRUCTION
5" HMA
8" UNTREATED BASE COURSE
 - INSTALL 2" LANDSCAPE ROCK IN PARK STRIP
 - ROADWAY RECONSTRUCTION
5" HMA
8" UNTREATED BASE COURSE
12" GRANULAR BORROW





LEGEND & NOTES

- CUT & FILL AT 3:1 SLOPE BEHIND BACK OF WALK TO MATCH EX. GRADE
- ROADWAY RECONSTRUCTION
5" HMA
8" UNTREATED BASE COURSE
 - INSTALL 2" LANDSCAPE ROCK
IN PARK STRIP
 - ROADWAY RECONSTRUCTION
5" HMA
8" UNTREATED BASE COURSE
12" GRANULAR BORROW



NO.	DATE	APPROVED BY	REMARKS



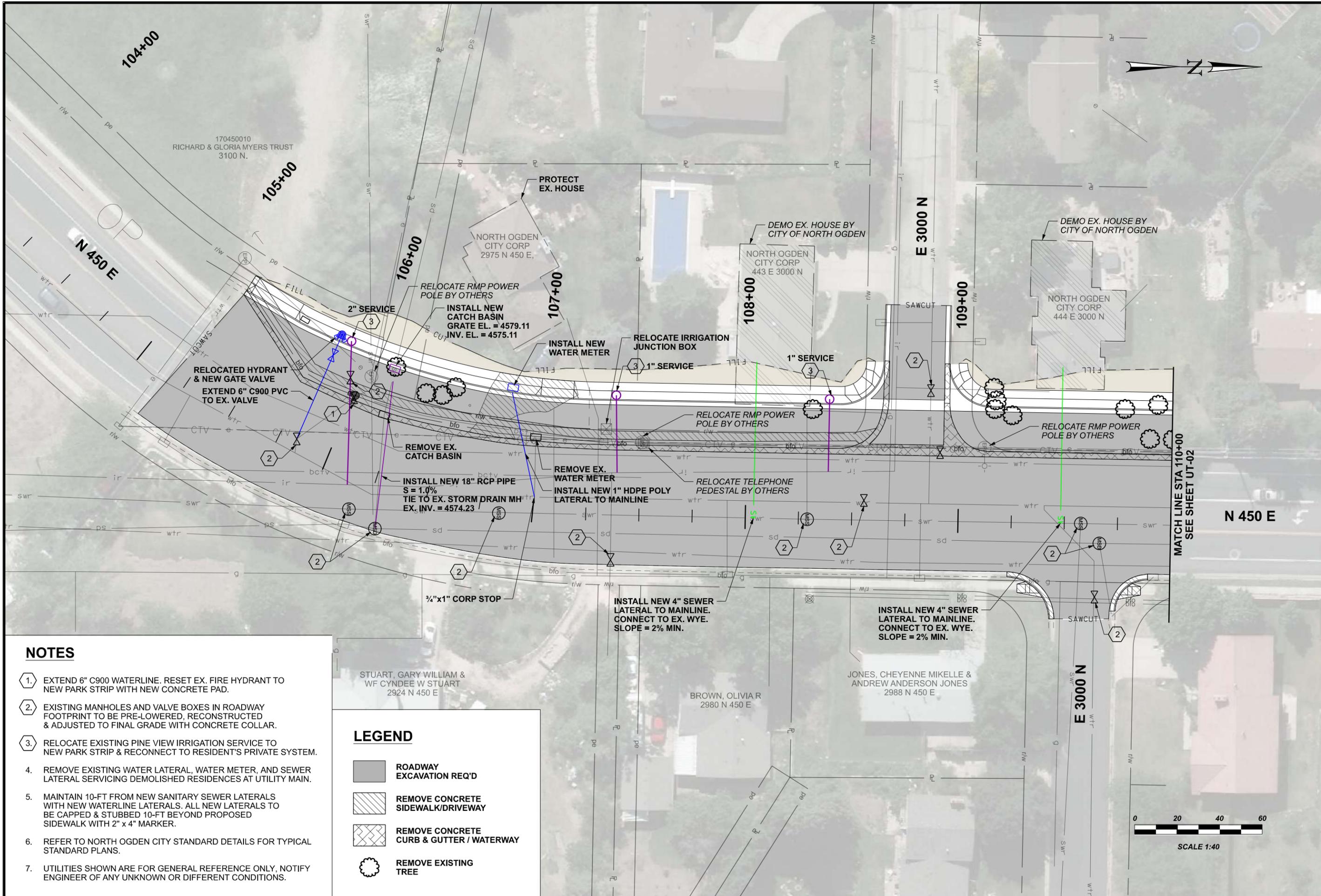
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NORTH OGDEN CITY
 450 EAST WIDENING
 PROJECT PHASE 2
ROADWAY & GRADING

SHEET NO.	8
SHEET TYP.	RD-03
PROJ. NO.	24-131

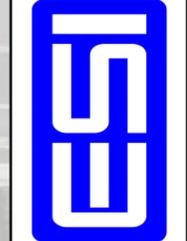


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BFC	CHECKED BY

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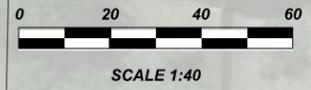
NORTH OGDEN CITY
 450 EAST WIDENING
 PROJECT PHASE 2
 REMOVAL & UTILITY

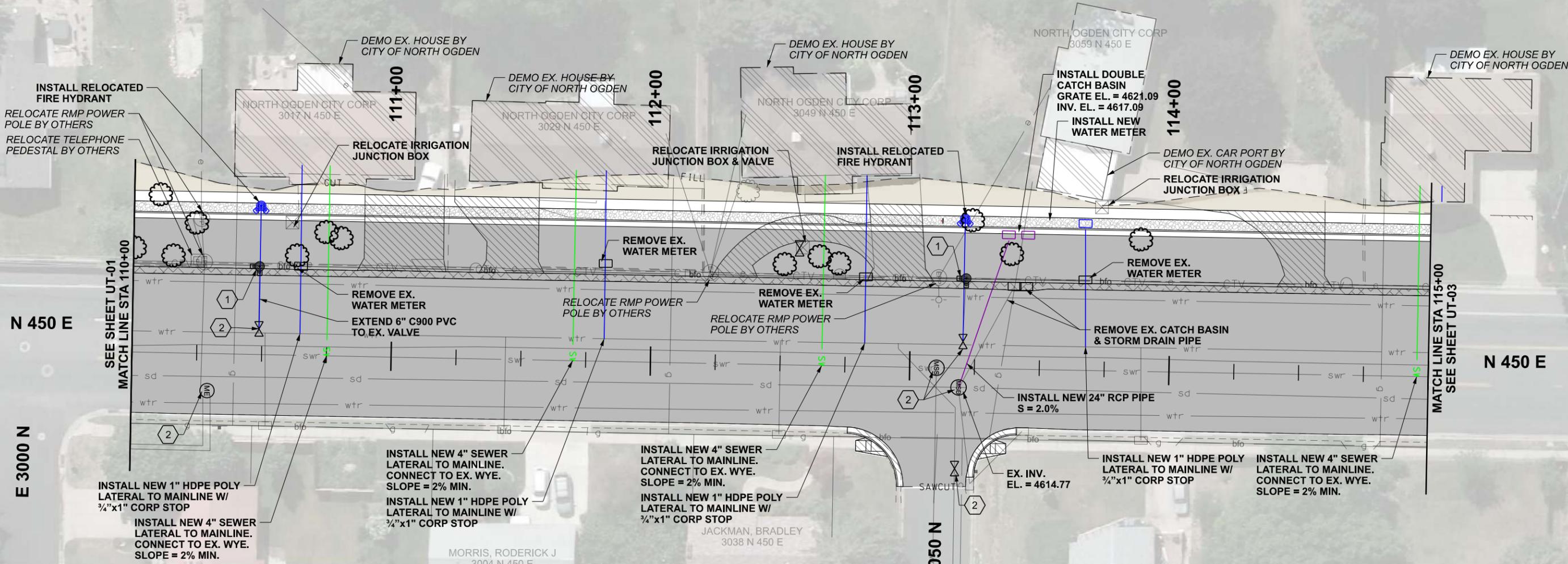
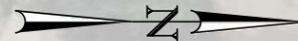
SHEET NO.	9
SHEET TYP.	UT-01
PROJ. NO.	24-131

- NOTES**
- EXTEND 6" C900 WATERLINE. RESET EX. FIRE HYDRANT TO NEW PARK STRIP WITH NEW CONCRETE PAD.
 - EXISTING MANHOLES AND VALVE BOXES IN ROADWAY FOOTPRINT TO BE PRE-LOWERED, RECONSTRUCTED & ADJUSTED TO FINAL GRADE WITH CONCRETE COLLAR.
 - RELOCATE EXISTING PINE VIEW IRRIGATION SERVICE TO NEW PARK STRIP & RECONNECT TO RESIDENT'S PRIVATE SYSTEM.
 - REMOVE EXISTING WATER LATERAL, WATER METER, AND SEWER LATERAL SERVICING DEMOLISHED RESIDENCES AT UTILITY MAIN.
 - MAINTAIN 10-FT FROM NEW SANITARY SEWER LATERALS WITH NEW WATERLINE LATERALS. ALL NEW LATERALS TO BE CAPPED & STUBBED 10-FT BEYOND PROPOSED SIDEWALK WITH 2" x 4" MARKER.
 - REFER TO NORTH OGDEN CITY STANDARD DETAILS FOR TYPICAL STANDARD PLANS.
 - UTILITIES SHOWN ARE FOR GENERAL REFERENCE ONLY, NOTIFY ENGINEER OF ANY UNKNOWN OR DIFFERENT CONDITIONS.

LEGEND

	ROADWAY EXCAVATION REQ'D
	REMOVE CONCRETE SIDEWALK/DRIVEWAY
	REMOVE CONCRETE CURB & GUTTER / WATERWAY
	REMOVE EXISTING TREE





NOTES

- 1. EXTEND 6" C900 WATERLINE. RESET EX. FIRE HYDRANT TO NEW PARK STRIP WITH NEW CONCRETE PAD.
- 2. EXISTING MANHOLES AND VALVE BOXES IN ROADWAY FOOTPRINT TO BE PRE-LOWERED, RECONSTRUCTED & ADJUSTED TO FINAL GRADE WITH CONCRETE COLLAR.
- 3. REMOVE EXISTING WATER LATERAL, WATER METER, AND SEWER LATERAL SERVICING DEMOLISHED RESIDENCES AT UTILITY MAIN.
- 4. MAINTAIN 10-FT FROM NEW SANITARY SEWER LATERALS WITH NEW WATERLINE LATERALS. ALL NEW LATERALS TO BE CAPPED & STUBBED 10-FT BEYOND PROPOSED SIDEWALK WITH 2" x 4" MARKER.
- 5. REFER TO NORTH OGDEN CITY STANDARD DETAILS FOR TYPICAL STANDARD PLANS.
- 6. UTILITIES SHOWN ARE FOR GENERAL REFERENCE ONLY, NOTIFY ENGINEER OF ANY UNKNOWN OR DIFFERENT CONDITIONS.

LEGEND

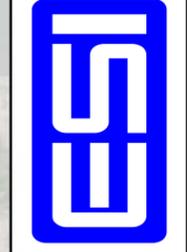
- ROADWAY EXCAVATION REQ'D
- REMOVE CONCRETE SIDEWALK/DRIVEWAY
- REMOVE CONCRETE CURB & GUTTER / WATERWAY
- REMOVE EXISTING TREE

NO.	DATE	APPROVED BY	REMARKS



10/17/2025	DATE	MDF	BFC
	DRAWN BY		
	CHECKED BY		

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 AND LAND SURVEYORS
 4141 W 2100 S, SUITE 100
 SALT LAKE CITY, UTAH 84120
 TEL: 801.263.1752 FAX: 801.263.1780



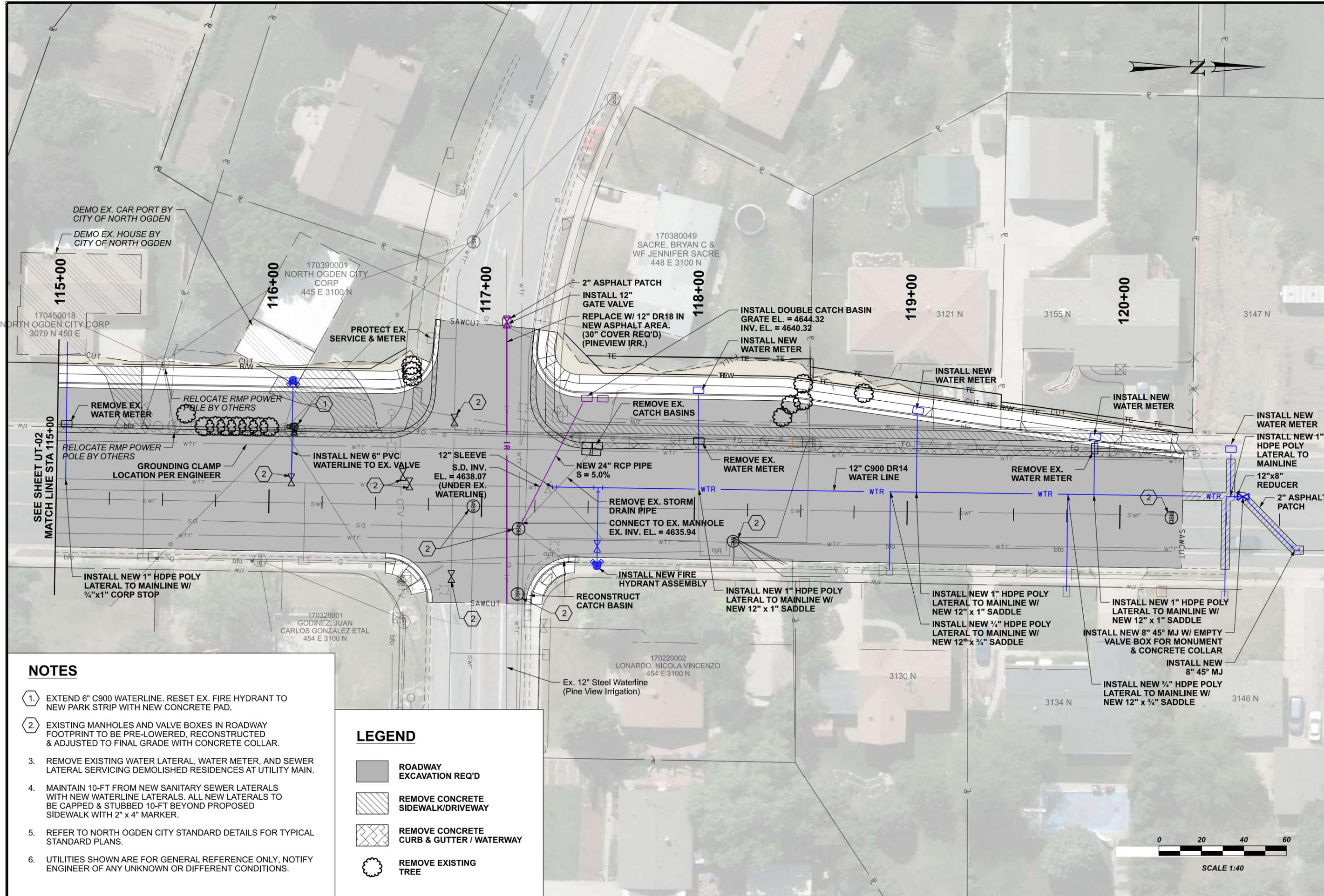
NORTH OGDEN CITY
 450 EAST WIDENING
 PROJECT PHASE 2
 REMOVAL & UTILITY

SHEET NO. 10

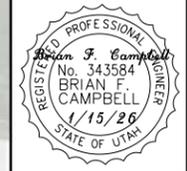
SHEET TYP. UT-02

PROJ. NO. 24-131



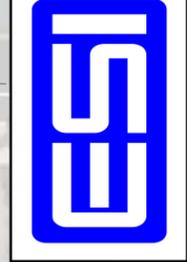


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 AND LAND SURVEYORS
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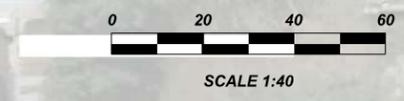
NORTH OGDEN CITY
 450 EAST WIDENING
 PROJECT PHASE 2
 REMOVAL & UTILITY

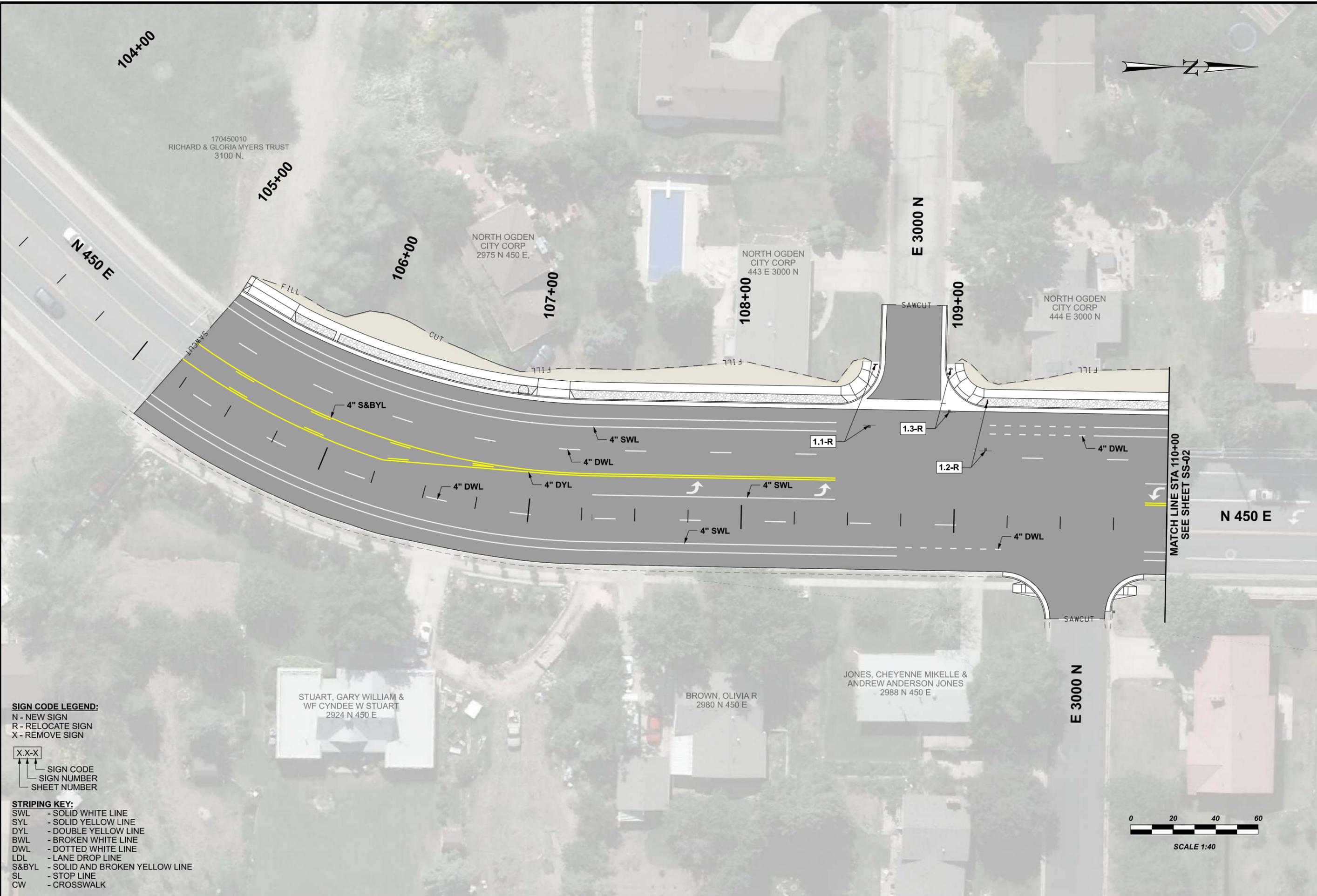
SHEET NO.	11
SHEET TYP.	UT-03
PROJ. NO.	24-131

- NOTES**
- EXTEND 6" C900 WATERLINE. RESET EX. FIRE HYDRANT TO NEW PARK STRIP WITH NEW CONCRETE PAD.
 - EXISTING MANHOLES AND VALVE BOXES IN ROADWAY FOOTPRINT TO BE PRE-LOWERED, RECONSTRUCTED & ADJUSTED TO FINAL GRADE WITH CONCRETE COLLAR.
 - REMOVE EXISTING WATER LATERAL, WATER METER, AND SEWER LATERAL SERVICING DEMOLISHED RESIDENCES AT UTILITY MAIN.
 - MAINTAIN 10-FT FROM NEW SANITARY SEWER LATERALS WITH NEW WATERLINE LATERALS. ALL NEW LATERALS TO BE CAPPED & STUBBED 10-FT BEYOND PROPOSED SIDEWALK WITH 2" x 4" MARKER.
 - REFER TO NORTH OGDEN CITY STANDARD DETAILS FOR TYPICAL STANDARD PLANS.
 - UTILITIES SHOWN ARE FOR GENERAL REFERENCE ONLY, NOTIFY ENGINEER OF ANY UNKNOWN OR DIFFERENT CONDITIONS.

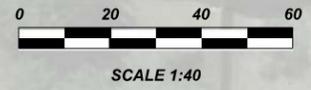
LEGEND

	ROADWAY EXCAVATION REQ'D
	REMOVE CONCRETE SIDEWALK/DRIVEWAY
	REMOVE CONCRETE CURB & GUTTER / WATERWAY
	REMOVE EXISTING TREE

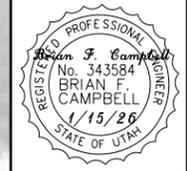




- SIGN CODE LEGEND:**
 N - NEW SIGN
 R - RELOCATE SIGN
 X - REMOVE SIGN
- X.X-X
 SIGN CODE
 SIGN NUMBER
 SHEET NUMBER
- STRIPING KEY:**
 SWL - SOLID WHITE LINE
 SYL - SOLID YELLOW LINE
 DYL - DOUBLE YELLOW LINE
 BWL - BROKEN WHITE LINE
 DWL - DOTTED WHITE LINE
 LDL - LANE DROP LINE
 S&BYL - SOLID AND BROKEN YELLOW LINE
 SL - STOP LINE
 CW - CROSSWALK



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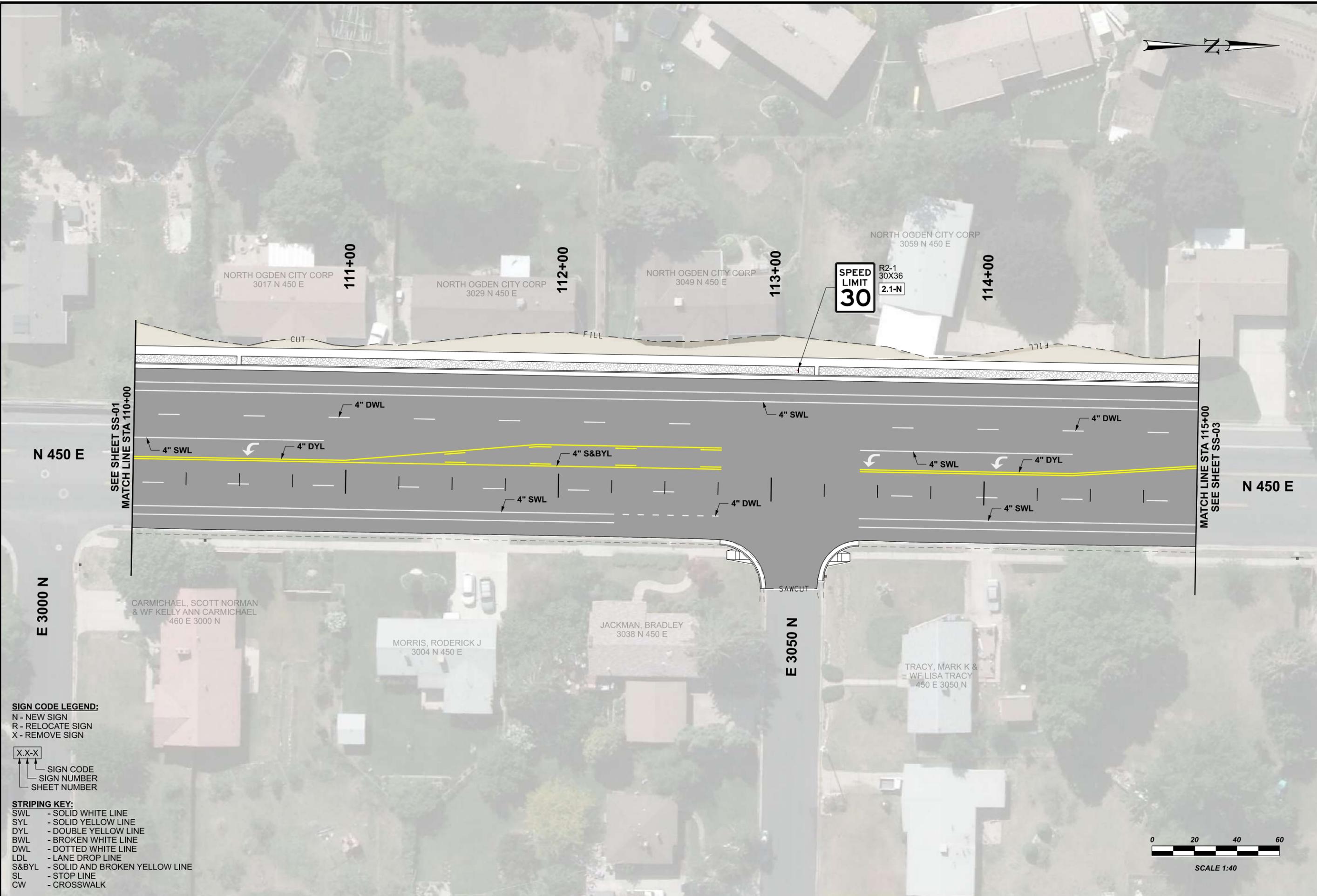
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NORTH OGDEN CITY
 450 EAST WIDENING
 PROJECT PHASE 2
SIGNING & STRIPING

SHEET NO.	12
SHEET TYP.	SS-01
PROJ. NO.	24-131

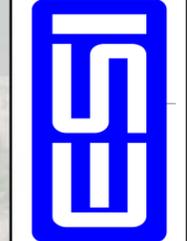


NO.	DATE	APPROVED BY	REMARKS



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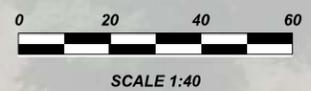
NORTH OGDEN CITY
 450 EAST WIDENING
 PROJECT PHASE 2
SIGNING & STRIPING

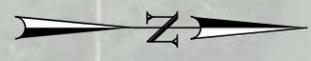
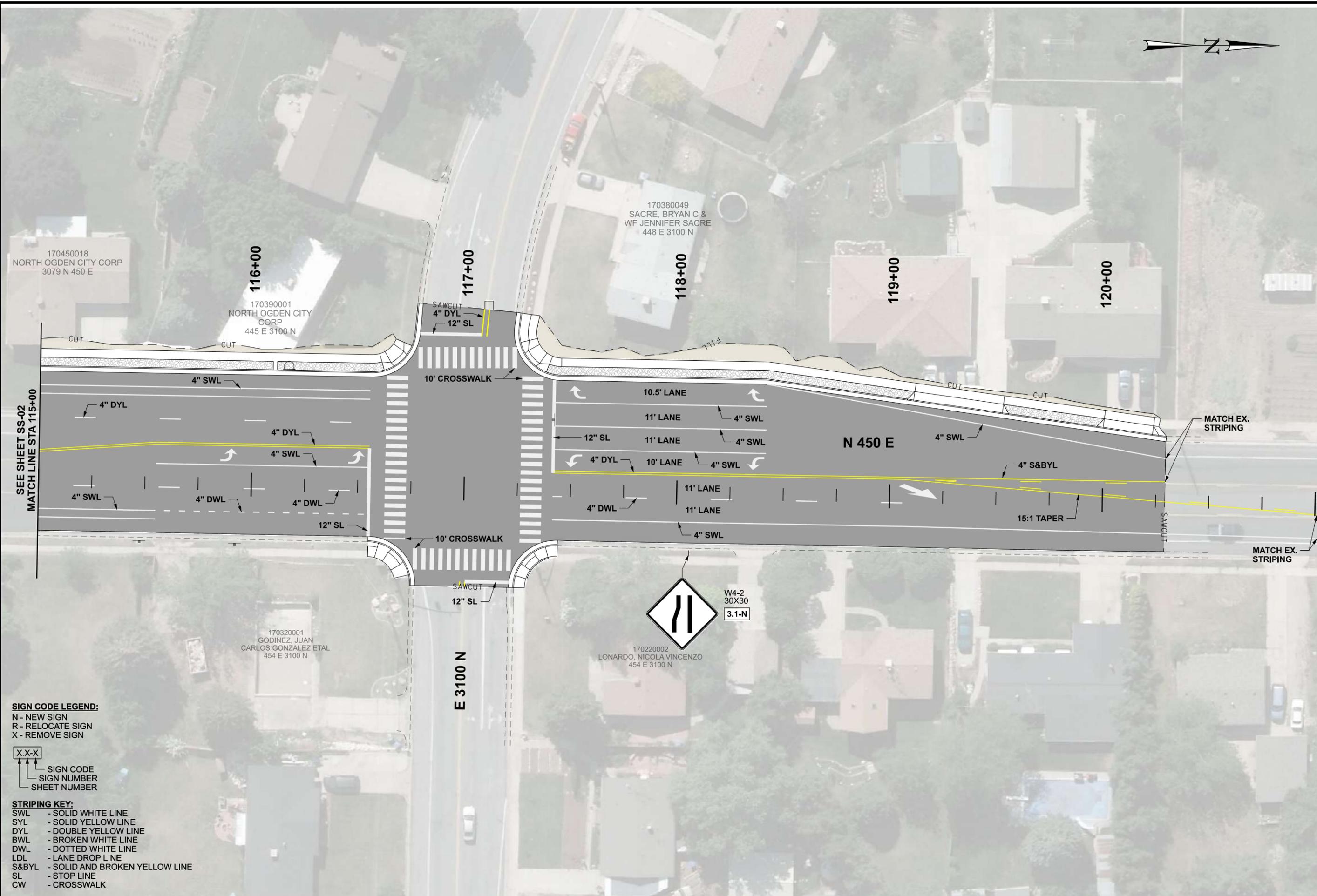
SHEET NO.	13
SHEET TYP.	SS-02
PROJ. NO.	24-131

SIGN CODE LEGEND:
 N - NEW SIGN
 R - RELOCATE SIGN
 X - REMOVE SIGN

X.X-X
 SIGN CODE
 SIGN NUMBER
 SHEET NUMBER

STRIPING KEY:
 SWL - SOLID WHITE LINE
 SYL - SOLID YELLOW LINE
 DYL - DOUBLE YELLOW LINE
 BWL - BROKEN WHITE LINE
 DWL - DOTTED WHITE LINE
 LDL - LANE DROP LINE
 S&BYL - SOLID AND BROKEN YELLOW LINE
 SL - STOP LINE
 CW - CROSSWALK





170450018
NORTH OGDEN CITY CORP
3079 N 450 E

170390001
NORTH OGDEN CITY CORP
445 E 3100 N

170380049
SACRE, BRYAN C &
WF JENNIFER SACRE
448 E 3100 N

170320001
GODINEZ, JUAN
CARLOS GONZALEZ ETAL
454 E 3100 N

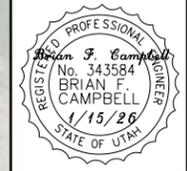
170220002
LONARDO, NICOLA VINCENZO
454 E 3100 N

SIGN CODE LEGEND:
N - NEW SIGN
R - RELOCATE SIGN
X - REMOVE SIGN

X.X-X
SIGN CODE
SIGN NUMBER
SHEET NUMBER

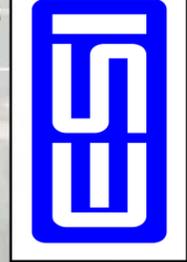
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SWL - SOLID WHITE LINE
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NO.	DATE	APPROVED BY	REMARKS



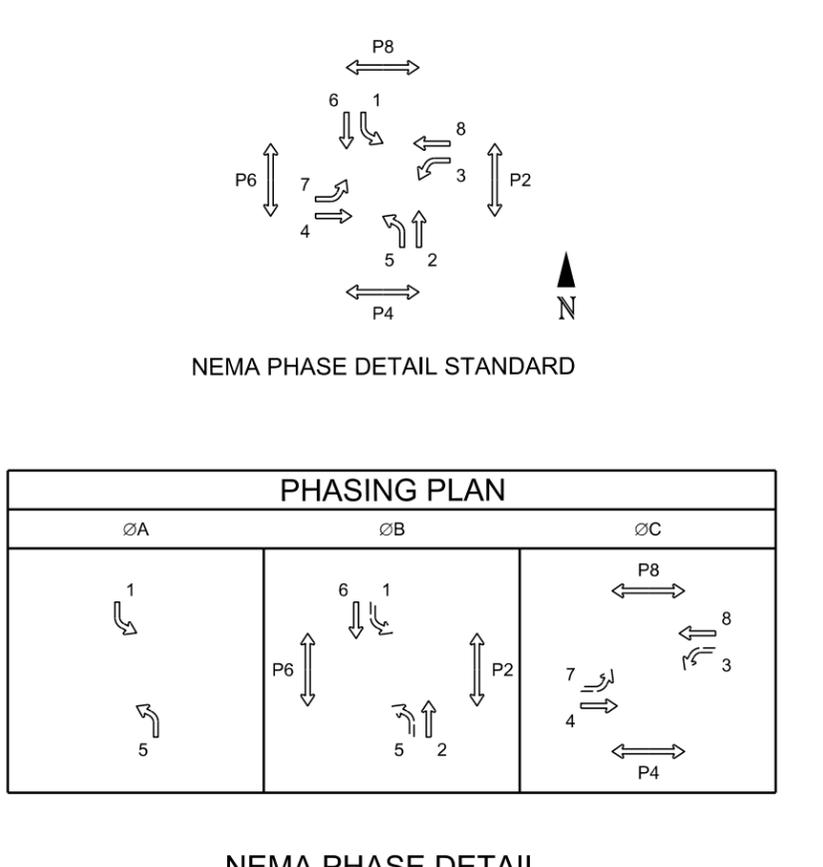
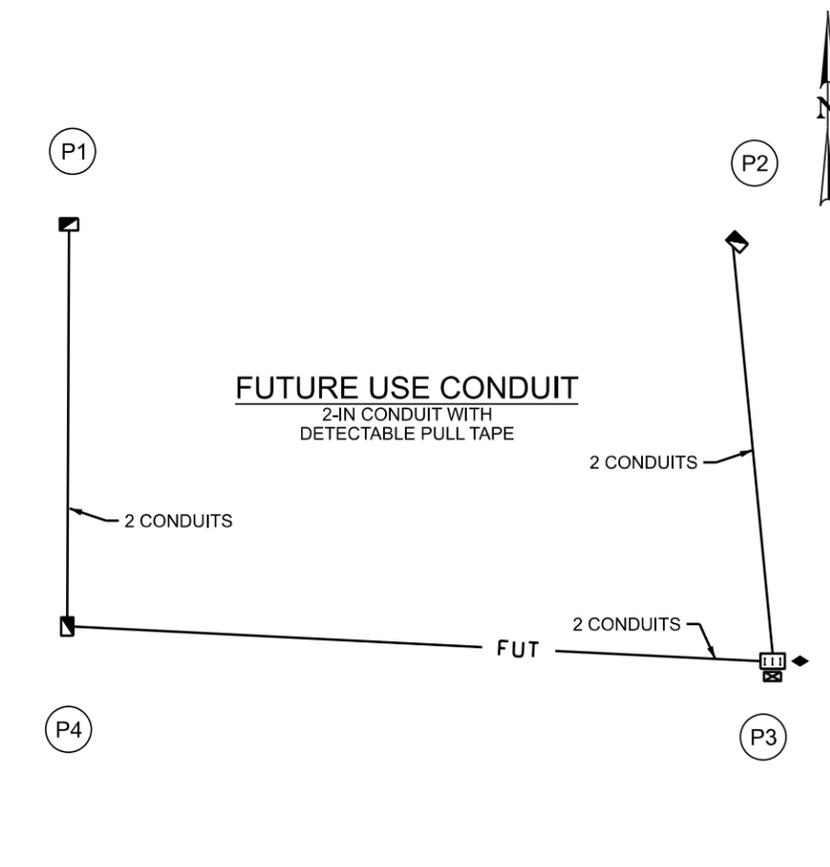
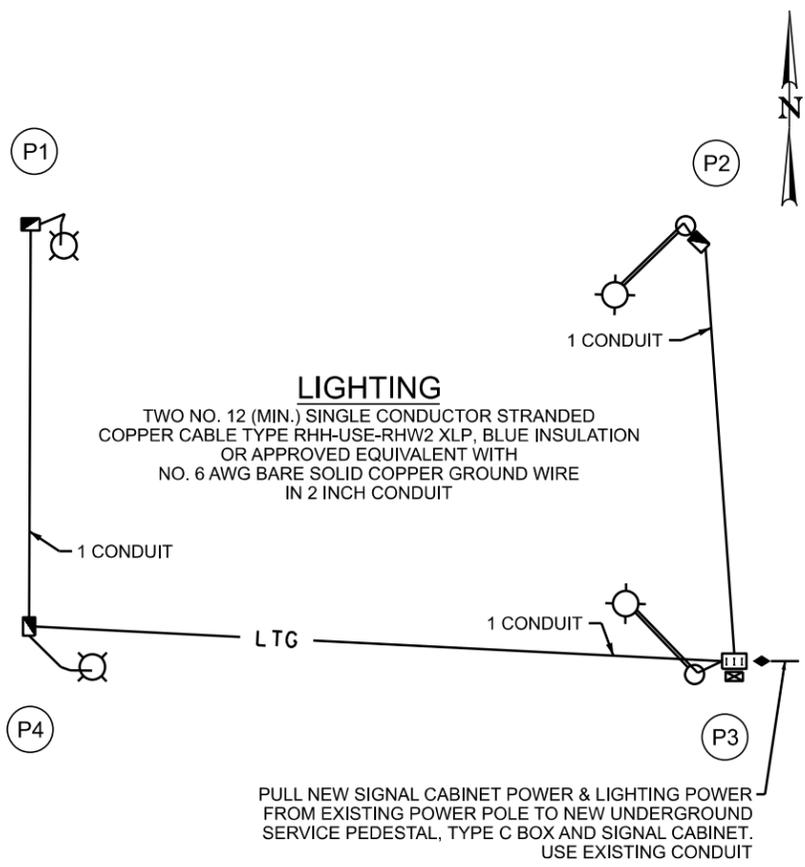
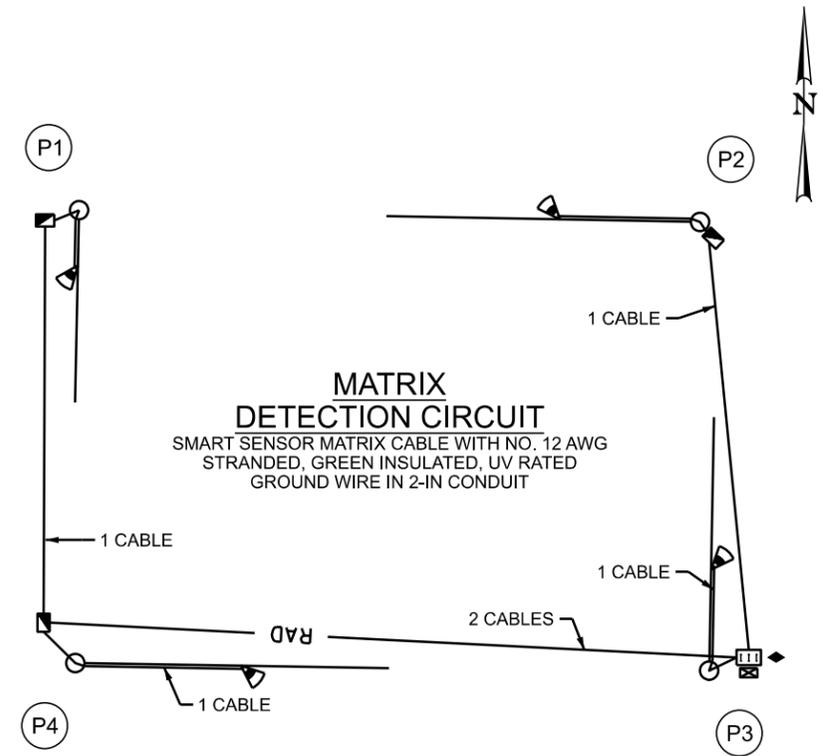
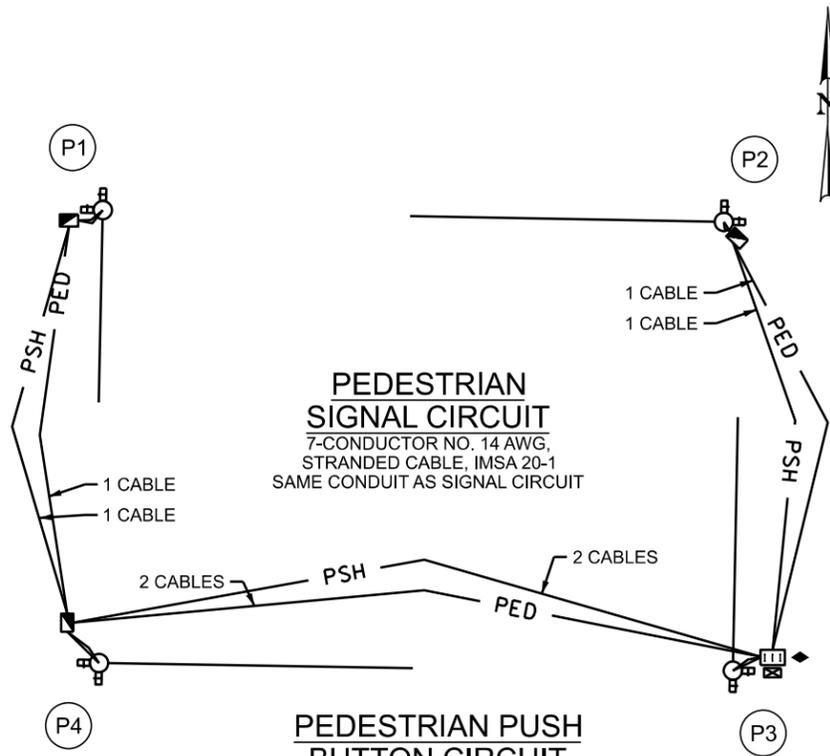
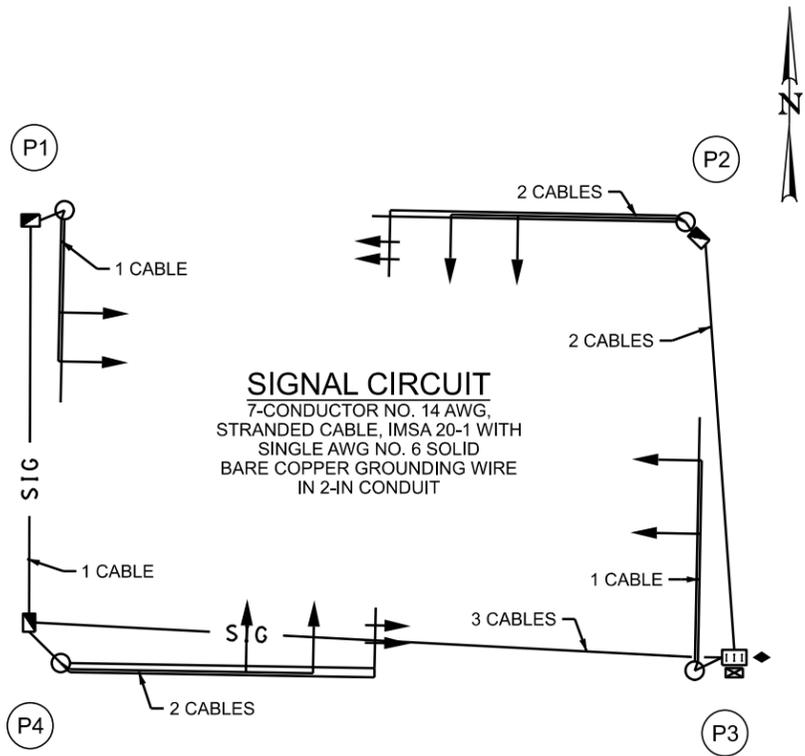
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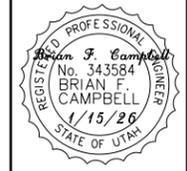


NORTH OGDEN CITY
450 EAST WIDENING
PROJECT PHASE 2
SIGNING & STRIPING

SHEET NO. 14
SHEET TYP. SS-03
PROJ. NO. 24-131

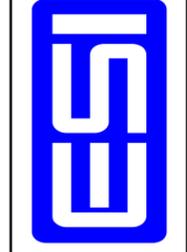


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NORTH OGDEN CITY
450 EAST WIDENING
PROJECT PHASE 2
SIGNAL PLAN

SHEET NO. 16
SHEET TYP. SG-02
PROJ. NO. 24-131

CONTRACTOR FURNISHED MATERIALS

	STRUCTURAL SUPPORT						POWER			CONDUIT					JUNCTION BOX			SIGN			
	MAST ARM SIGNAL POLE FOUNDATION - 3' x 12' (30' TO 65')	MAST ARM SIGNAL POLE FOUNDATION - 3' x 14' (70' TO 75')	MAST ARM SIGNAL POLE FOUNDATION - 4' x 14' (80' TO 85')	TRAFFIC SIGNAL/PEDESTAL FOUNDATION - 2' x 3'	HIGHWAY LUMINAIRE POLE FOUNDATION - 2.5' x 8'	CABINET FOUNDATION	UNDERGROUND SERVICE PEDESTAL FOUNDATION	UNDERGROUND SERVICE PEDESTAL	DUAL METER UNDERGROUND SERVICE PEDESTAL	POWER SOURCE (120 VOLT)	2" CONDUIT	2 1/2" CONDUIT	3" CONDUIT	2" CONDUIT WITH DETECTABLE PULL TAPE (FUTURE USE)	TRENCHING PAVED SURFACE	TRENCHING UNPAVED SURFACE	DIRECTIONAL BORING	TYPE A	TYPE B	TYPE C	MAST ARM MOUNTED SIGN WITH MOUNTING BRACKETS
	EA	EA	EA	EA	EA	EA	EA	EA	EA	LIN FT	LIN FT	LIN FT	LIN FT	LIN FT	LIN FT	LIN FT	EA	EA	EA	EA / SQ FT	EA
TOTALS	4					1	1	1		950			250			250		4	8	8 / 60	

CONTRACTOR FURNISHED MATERIALS

	SIGNAL AND PEDESTRIAN						LIGHTING		GROUNDING		DETECTION					
	4 CONDUCTOR NO. 14 CABLE (SIGNAL CIRCUIT)	7 CONDUCTOR NO. 14 CABLE (SIGNAL CIRCUIT)	7 CONDUCTOR NO. 14 CABLE (PED CIRCUIT)	4 CONDUCTOR NO. 14 CABLE (PUSH BUTTON CIR)	COUNTDOWN PEDESTRIAN SIGNAL HEAD	PUSH BUTTON AND SIGN ASSEMBLY	PUSH BUTTON FRAME STAND-OFF BRACKET	NO. 4 SINGLE CONDUCTOR CABLE	NO. 6 SINGLE CONDUCTOR CABLE	NO. 12 SINGLE CONDUCTOR CABLE, BLUE INSULATION	GROUND ROD	NO. 6 BARE COPPER GROUND WIRE	NO. 12 STRANDED GROUND WIRE (STOP BAR DETECTION)	SMART SENSOR ADVANCE CABLE (SEE NOTE 5)	SMART SENSOR MATRIX CABLE (SEE NOTE 5)	PREEMPTION CONTROL CABLE (SEE NOTE 6)
	LIN FT	LIN FT	LIN FT	LIN FT	EA	EA	EA	LIN FT	LIN FT	LIN FT	EA	LIN FT	LIN FT	LIN FT	LIN FT	LIN FT
TOTALS		950	500	450	8	8	8	30	1000	8	550	600		600		

RELOCATE EXISTING MATERIALS

	CONTROLLER	MMU	TS-2 SIZE 6 SIGNAL CABINET	STOPBAR RADAR SENSOR (MATRIX)	SENSOR MOUNT	ARC6 (4-SENSORS)	100' CABLE W-CONNECTOR	ITS RADIO & CABINET SWITCH EQUIPMENT
	EA	EA	EA	EA	EA	EA	EA	LS
TOTALS	1	1	1	4	4	1	4	1

NOTES:

1. CONTACT THE SERVING POWER COMPANY A MINIMUM OF THIRTY (30) DAYS BEFORE POWER SERVICE IS REQUIRED. SEE DETAIL FOR UNDERGROUND SERVICE PEDESTAL. CONTACT REGION SIGNAL CREW THREE (3) DAYS IN ADVANCE OF UNDERGROUND SERVICE PEDESTAL INSPECTION. MAKE ALL ARRANGEMENTS WITH LOCAL POWER COMPANY FOR INSTALLATION.
2. PLACE ALL CONDUIT IN SAME TRENCH OR BORE SHOT WHERE POSSIBLE.
3. CONSTRUCT SIGNAL IN A MANNER TO AVOID DAMAGE TO EXISTING UTILITIES. ASSUME RESPONSIBILITY FOR ANY UTILITY DAMAGED BY CONSTRUCTION OPERATIONS. THE PLANS SHOW BURIED UTILITY LOCATIONS IN THEIR APPROXIMATE LOCATION ONLY.

NO.	DATE	APPROVED BY	REMARKS



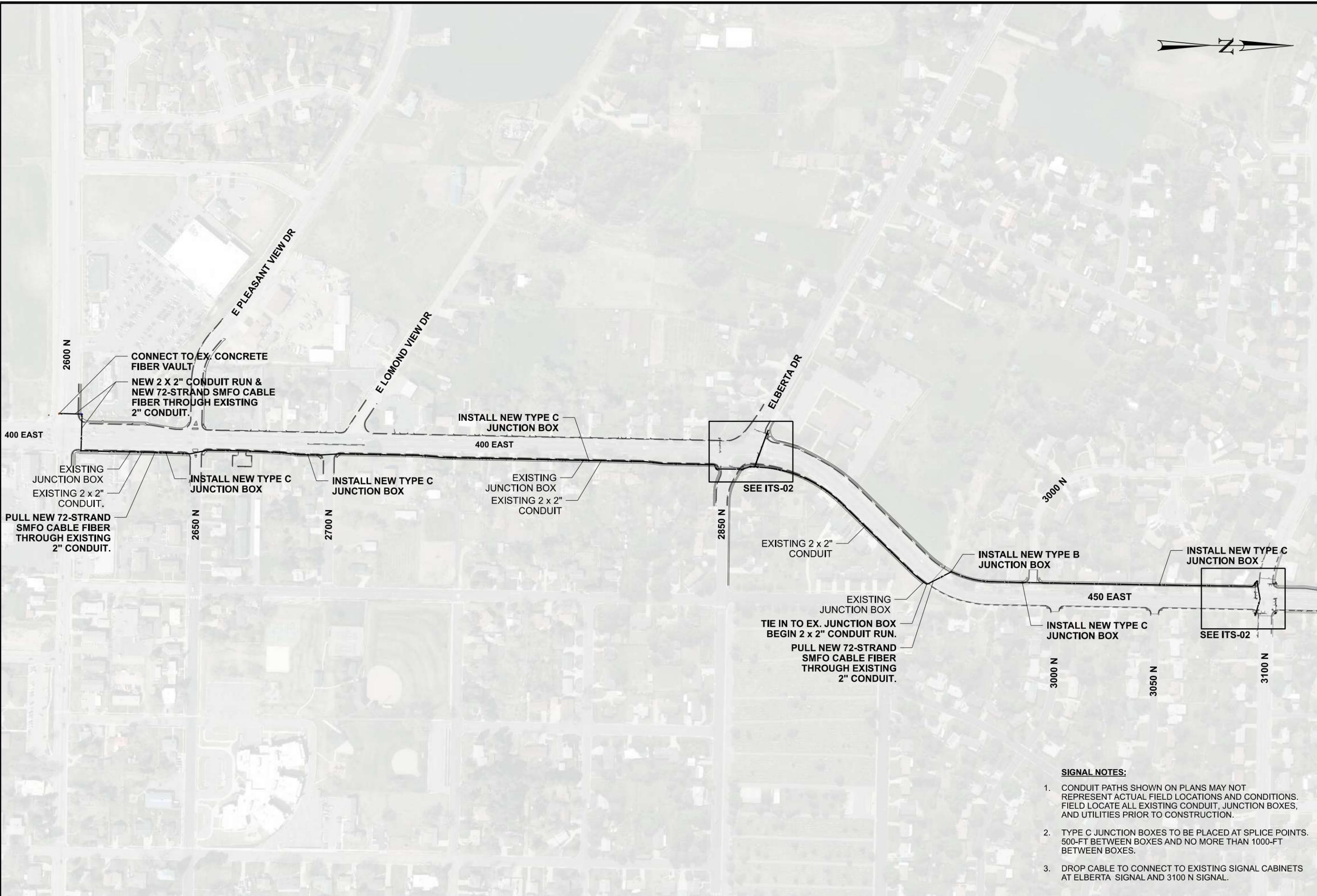
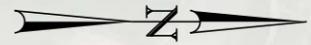
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 AND LAND SURVEYORS
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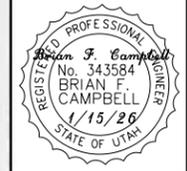


NORTH OGDEN CITY
 450 EAST WIDENING
 PROJECT PHASE 2
SIGNAL SCHEDULE

SHEET NO. 18
SHEET TYP. SG-S02
PROJ. NO. 24-131

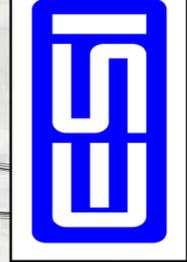


NO.	DATE	APPROVED BY	REMARKS



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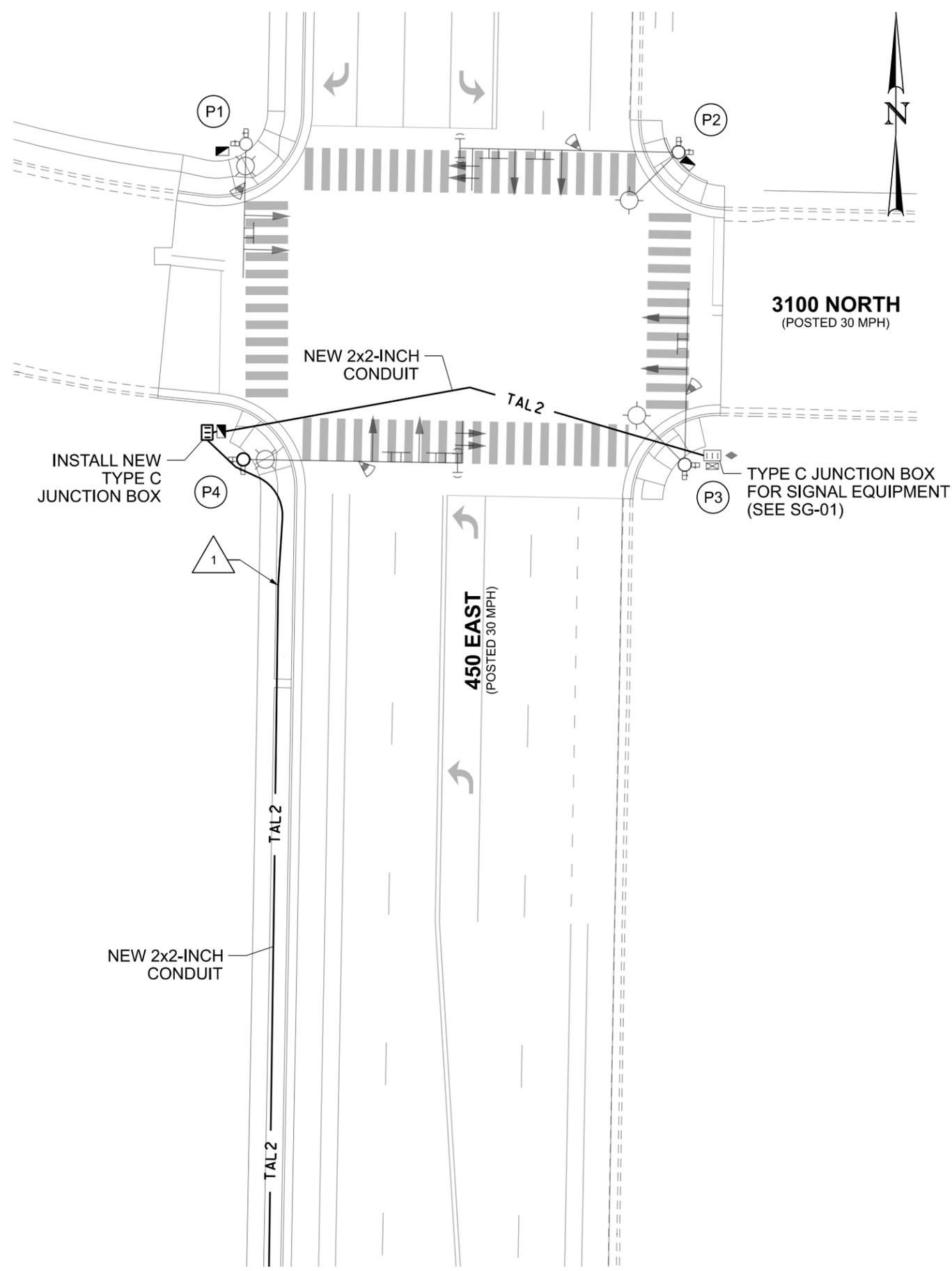
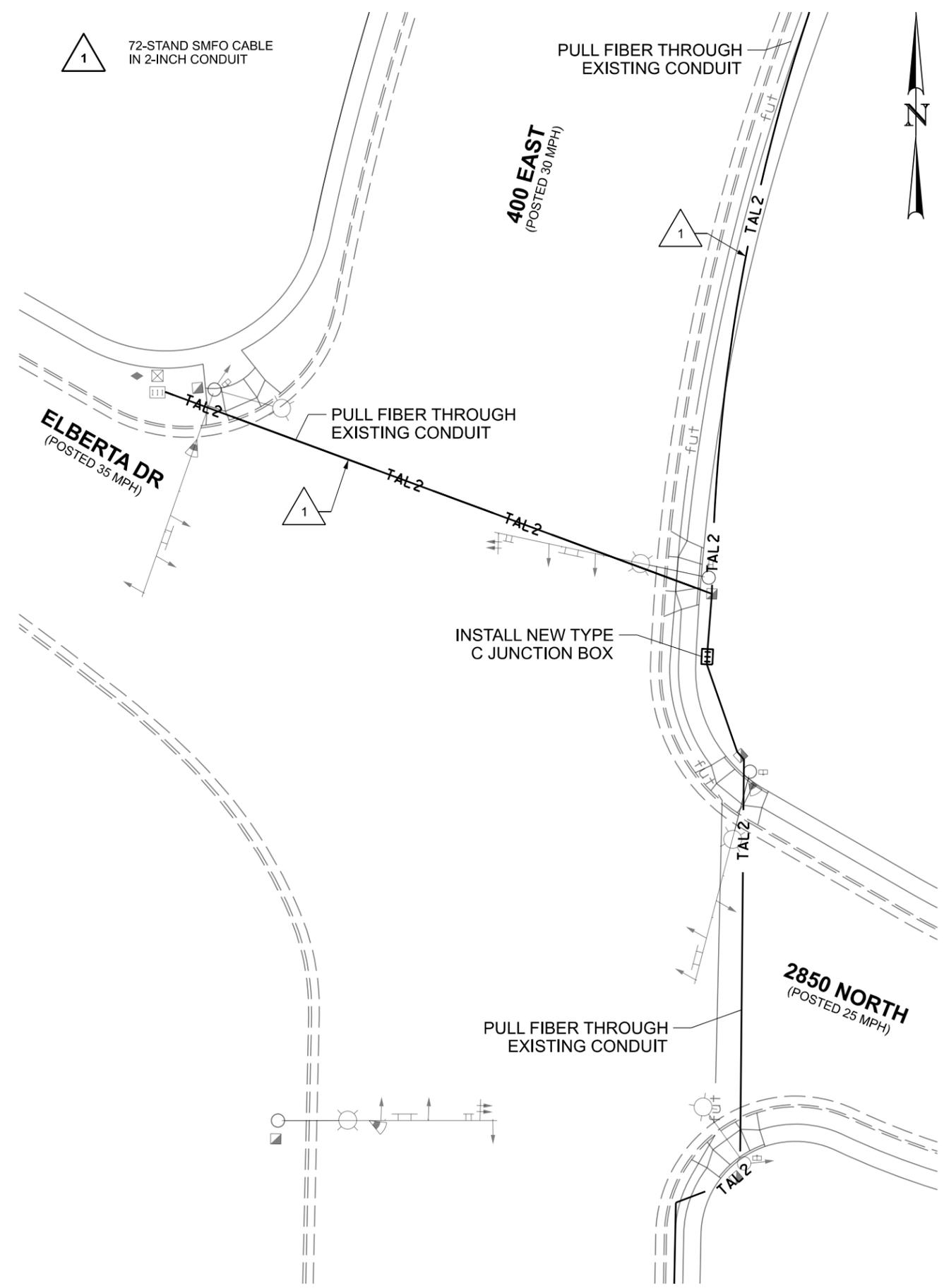
ESI ENGINEERING, INC.
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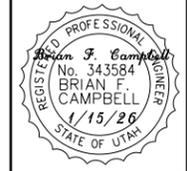
NORTH OGDEN CITY
 450 EAST WIDENING
 PROJECT PHASE 2
 ITS

SHEET NO.	19
SHEET TYP.	ITS-01
PROJ. NO.	24-131

- SIGNAL NOTES:**
1. CONDUIT PATHS SHOWN ON PLANS MAY NOT REPRESENT ACTUAL FIELD LOCATIONS AND CONDITIONS. FIELD LOCATE ALL EXISTING CONDUIT, JUNCTION BOXES, AND UTILITIES PRIOR TO CONSTRUCTION.
 2. TYPE C JUNCTION BOXES TO BE PLACED AT SPLICE POINTS. 500-FT BETWEEN BOXES AND NO MORE THAN 1000-FT BETWEEN BOXES.
 3. DROP CABLE TO CONNECT TO EXISTING SIGNAL CABINETS AT ELBERTA SIGNAL AND 3100 N SIGNAL.



NO.	DATE	APPROVED BY	REMARKS



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NORTH OGDEN CITY
 450 EAST WIDENING
 PROJECT PHASE 2
 ITS

SHEET NO. 20

SHEET TYP. ITS-02

PROJ. NO. 24-131

ITS MATERIALS									
	COMMUNICATIONS							SALVAGE	
	2" CONDUIT	72-STRAND SMFO CABLE	DIRECTIONAL BORING	FIBER JUMPER, SMF, LC-ST, DUPLEX, 3'	CISCO 8-PORT ETHERNET SWITCH	SPLICE CASE	FUSION SPLICE	CABINET ETHERNET SWITCH	RADIO EQUIPMENT
	LF	LF	LF	EA	EA	EA	EA	EA	EA
TOTALS	2970	5295	1275	4	2	2	4	1	1

NORTH OGDEN CITY
 450 EAST WIDENING
 PROJECT PHASE 2
ITS SCHEDULE

SHEET NO. 21
SHEET TYP. ITS-S01
PROJ. NO. 24-131

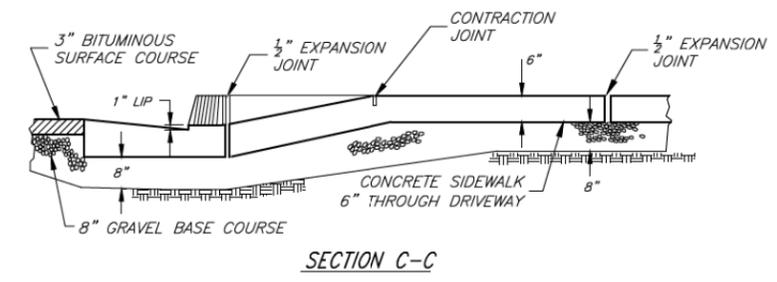
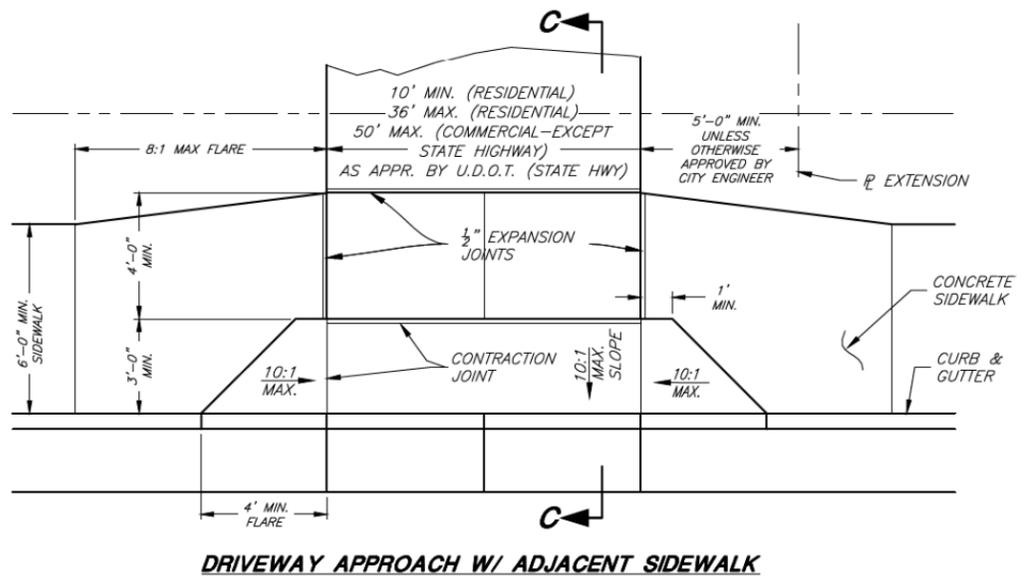
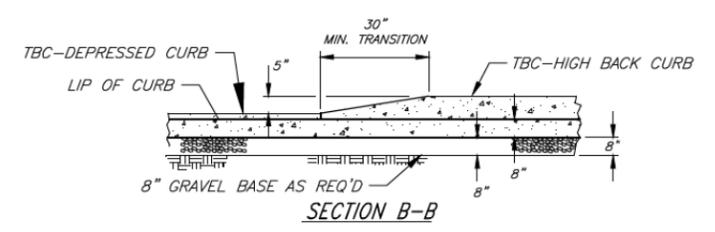
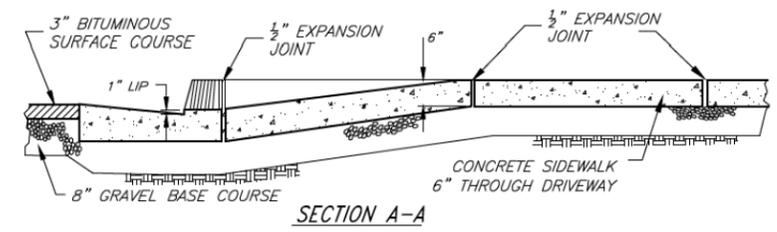
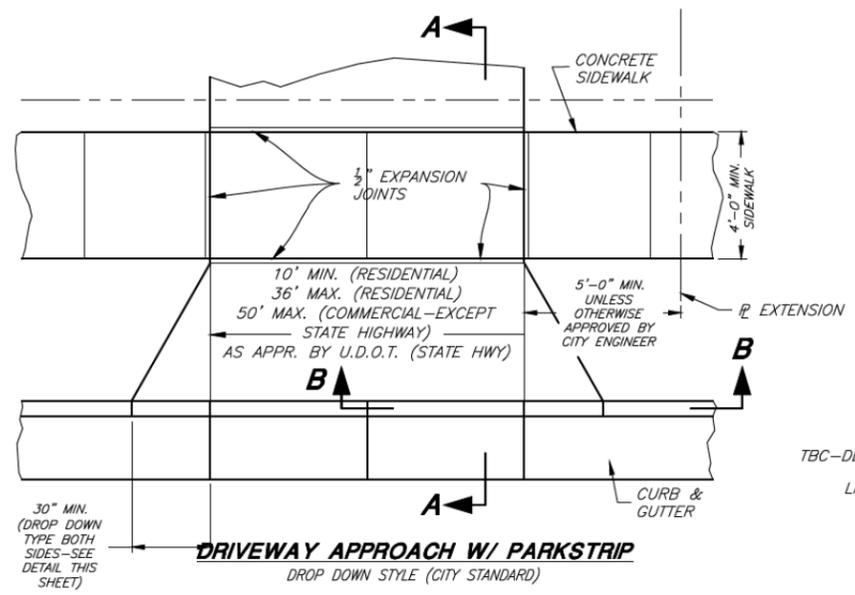


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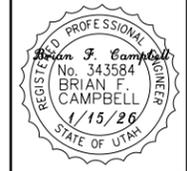
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 OC CHECKED BY BFC



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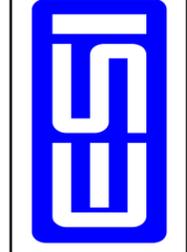


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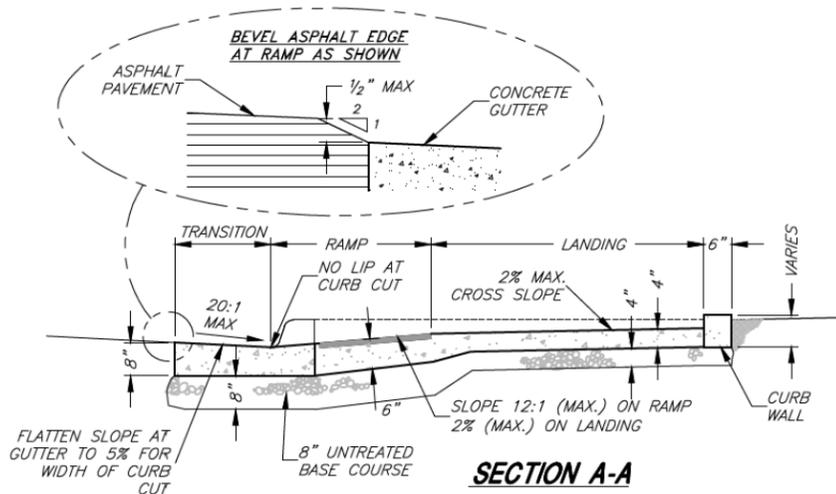
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NORTH OGDEN CITY
450 EAST WIDENING
PROJECT PHASE 2
STANDARD DETAILS

SHEET NO.	22
SHEET TYP.	DT-01
PROJ. NO.	24-131



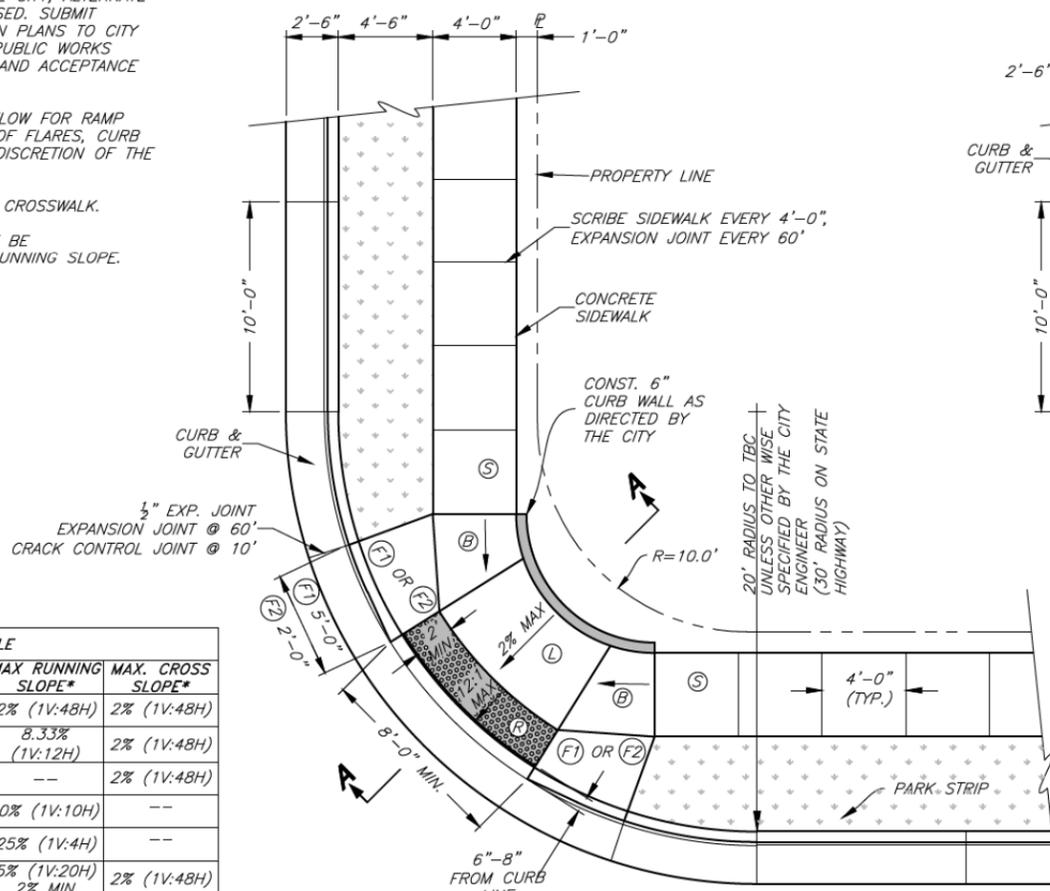
SECTION A-A

ADA RAMP NOTES:

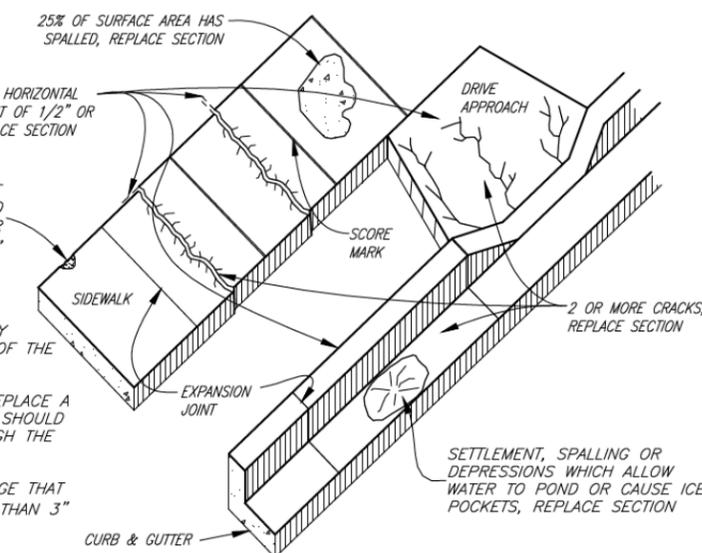
1. WHERE DESIGNATED BY THE CITY, ALTERNATE RAMP DESIGNS MAY BE USED. SUBMIT ENGINEERED CONSTRUCTION PLANS TO CITY ENGINEER AND THE CITY PUBLIC WORKS DEPARTMENT FOR REVIEW AND ACCEPTANCE PRIOR TO CONSTRUCTION.
2. USE THE SLOPE TABLE BELOW FOR RAMP CONSTRUCTION. THE USE OF FLARES, CURB WALLS, ETC. ARE AT THE DISCRETION OF THE ENGINEER.
3. LOCATE CURB CUT WITHIN CROSSWALK.
4. RAMP GRADE BREAK MUST BE PERPENDICULAR TO THE RUNNING SLOPE.

SLOPE TABLE			
ITEM	MAX RUNNING SLOPE*	MAX. CROSS SLOPE*	
Ⓛ	LANDING	2% (1V:48H)	2% (1V:48H)
Ⓡ	RAMP	8.33% (1V:12H)	2% (1V:48H)
Ⓢ	SIDEWALK	--	2% (1V:48H)
ⓕ1	TRAVERSABLE SURFACE	10% (1V:10H)	--
ⓕ2	NON-TRAVERSABLE SURFACE	25% (1V:4H)	--
Ⓟ	BLENDED TRANSITION	5% (1V:20H) 2% MIN.	2% (1V:48H)

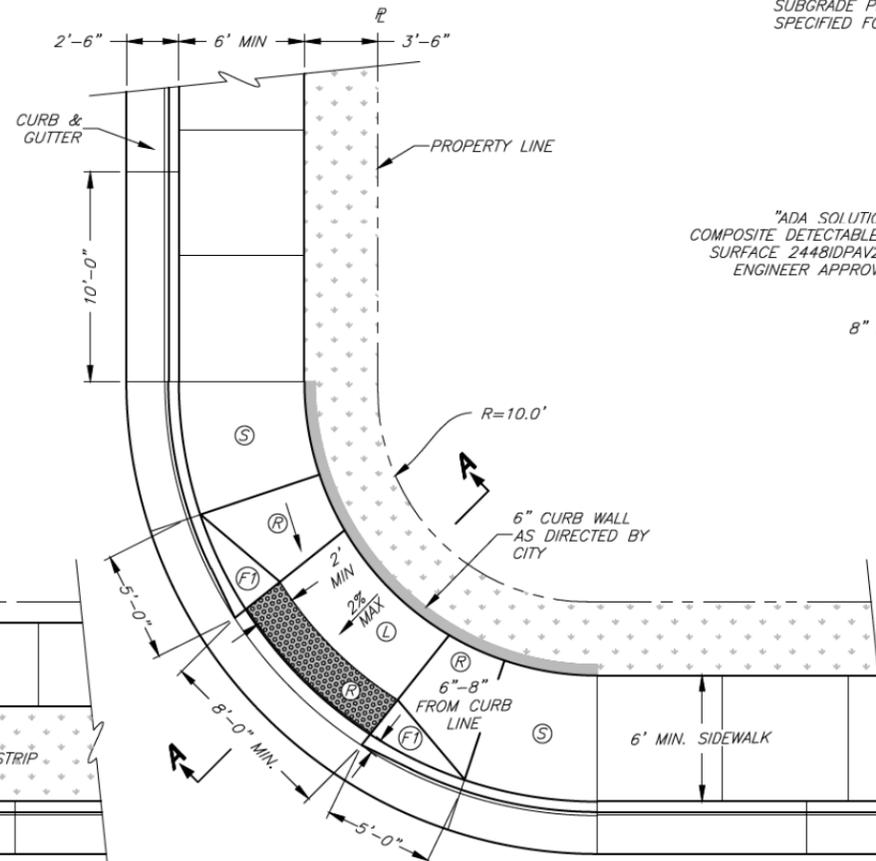
* RUNNING SLOPE IS IN THE DIRECTION OF PEDESTRIAN TRAVEL. CROSS SLOPE IS PERPENDICULAR TO PEDESTRIAN TRAVEL.



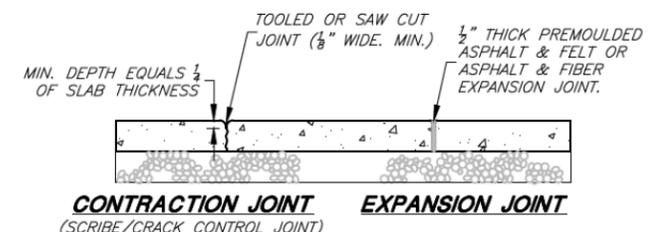
WHEEL CHAIR RAMP DETAIL "A"
CITY STANDARD (WITH PARK STRIP)



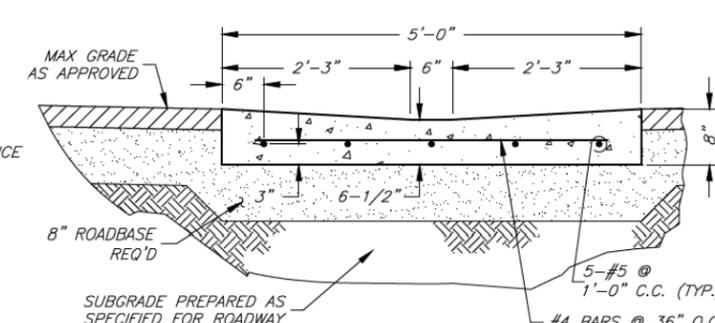
DEFECTIVE CONCRETE REPLACEMENT CRITERIA



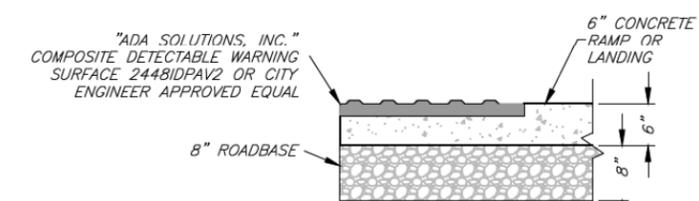
WHEELCHAIR RAMP DETAIL "B"
REQUIRES WRITTEN CITY APPROVAL (WITHOUT PARK STRIP)



JOINT DETAIL



CROSS DRAIN SECTION
(WHERE APPROVED BY CITY PUBLIC WORKS DIRECTOR AND THE CITY ENGINEER)

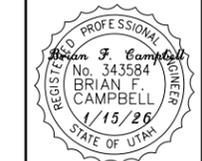


DETECTABLE WARNING SURFACE DETAIL

DETECTABLE WARNING SURFACE NOTES:

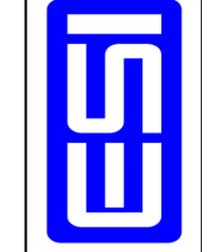
1. LOCATE DETECTABLE WARNING SURFACE SO THAT THE EDGE NEAREST THE CURB LINE OR OTHER POTENTIAL HAZARD IS 6 TO 8 INCHES FROM THE CURB LINE OR OTHER POTENTIAL HAZARD. PROVIDE 2-FOOT MINIMUM DEPTH.
2. PROVIDE DETECTABLE WARNING SURFACE FOR FULL WIDTH OF CURB CUT.
3. THE DETECTABLE WARNING SURFACE DOMES SHALL BE ORIENTED SUCH THAT THE ROWS ARE PARALLEL WITH THE DIRECTION OF PEDESTRIAN TRAVEL TO THE RAMP ON THE OPPOSITE SIDE OF THE STREET.
4. THE STANDARD COLOR FOR THE DETECTABLE WARNING SURFACE SHALL BE DARK GRAY OR PRE-APPROVED CONTRASTING COLOR. WHEN THE EXISTING SIDEWALK COLOR IS NOT STANDARD CONCRETE, THE COLOR OF THE DETECTABLE WARNING SURFACE SHALL BE DETERMINED BY THE CITY ENGINEER OR AUTHORIZED REPRESENTATIVE.
5. WHEN A DETECTABLE WARNING SURFACE DOME IS CUT, THE REMAINING PORTION OF THE DOME SHALL BE BEVELED TO A MAXIMUM SLOPE OF 1:2.

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NORTH OGDEN CITY
450 EAST WIDENING
PROJECT PHASE 2
STANDARD DETAILS

SHEET NO.	23
SHEET TYP.	DT-02
PROJ. NO.	24-131

THRUST PER PSI OF WATER PRESSURE AT VARIOUS FITTINGS				
PIPE SIZE (IN.)	DEAD END OR TEE (LB.)	90° ELBOW (LB.)	45° ELBOW (LB.)	22-1/2° ELBOW (LB.)
4	19	27	15	7
6	39	55	30	15
8	67	94	51	26
10	109	154	84	43
12	155	218	119	61
14	210	296	161	82
16	272	383	209	106
18	351	494	269	137
20	434	611	333	169
24	623	878	487	244
30	947	1,332	722	377
36	1,356	1,905	1,032	542

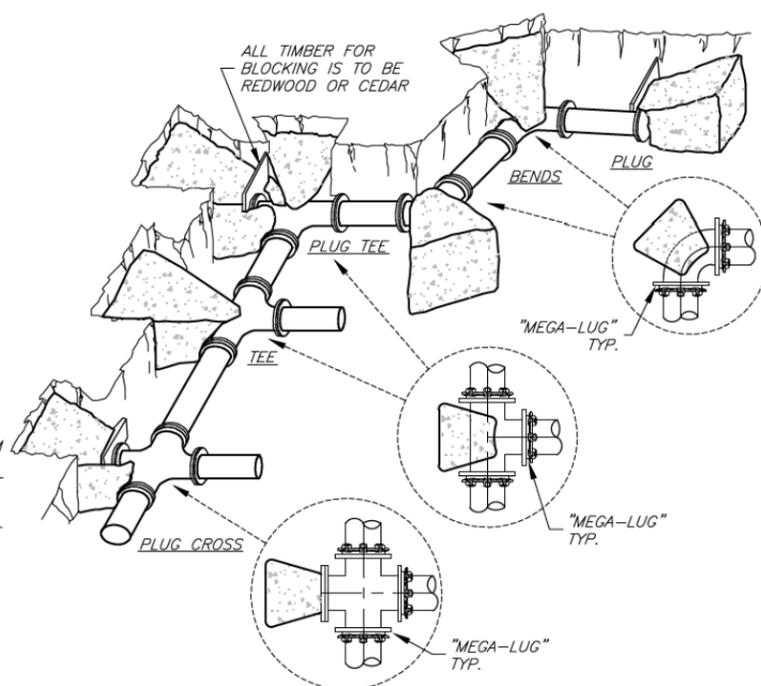
THRUST BLOCK TABLE NOTES:

- IN USING THE ABOVE TABLE, USE THE MAXIMUM INTERNAL PRESSURE ANTICIPATED (I.E. HYDROSTATIC TEST PRESSURE, POSSIBLE SURGE PRESSURE DUE TO PUMP SHUT OFF, ETC.).
- SEE SOILS REPORT FOR BEARING STRENGTH OF SOIL. IN THE ABSENCE OF A SOILS REPORT, AN AVERAGE SOIL (SPADABLE MEDIUM CLAY) CAN BE ASSUMED TO HAVE A BEARING STRENGTH OF 2000 P.S.F.

EXAMPLE:

8-INCH 90° ELBOW, PRESSURE 200 LB./SQ. IN.
 FROM TABLE: THRUST = 94 X 200 = 18,800 LB.
 ASSUME BEARING STRENGTH = 2,000 LB./SQ. FT.

$\frac{18,800}{2,000} = 9.4 \text{ SQ. FT.}$ AREA OF BEARING REQUIRED FOR THRUST BLOCK



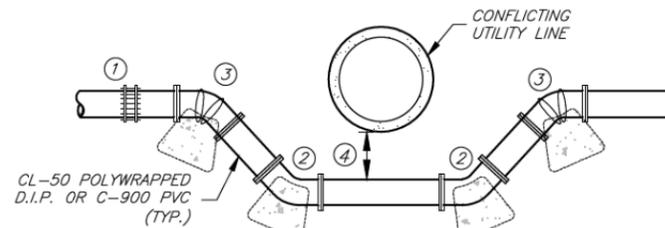
TYPICAL RETAINER GLANDS & THRUST BLOCKING

PIPE RESTRAINT

- ALL BENDS, CROSSES, TEES, REDUCERS, AND VALVES SHALL BE INSTALLED WITH RESTRAINING JOINTS ("MEGA-LUG" OR APPROVED EQUAL).
- DESIGN SHALL ALSO BE REQUIRED TO ENSURE ADEQUATE RESTRAINT FOR PIPING JOINTS NEAR FITTINGS BASED ON PIPE DIAMETER AND PIPE PRESSURE.

THRUST BLOCKING NOTES:

- CONCRETE SHALL NOT BE PLACED WITHIN 1-1/2" OF JOINTS AND BOLTS. COVER ALL METAL CONTACT AREAS WITH A POLY WRAP PRIOR TO CONCRETE PLACEMENT.
- IN THE ABSENCE OF A SOILS REPORT, ALL THRUST BLOCKS SHALL BE SIZED ON THE BASIS OF A MAXIMUM LATERAL BEARING VALUE FOR 2000 P.S.F. AND A THRUST RESULTING FROM 200% OF THE WATER LINE STATIC LINE TEST.
- THRUST BLOCKS ARE REQUIRED AT ALL BENDS OF 22-1/2° OR MORE.
- CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF NOT LESS THAN 2500 PSI IN 28 DAYS.



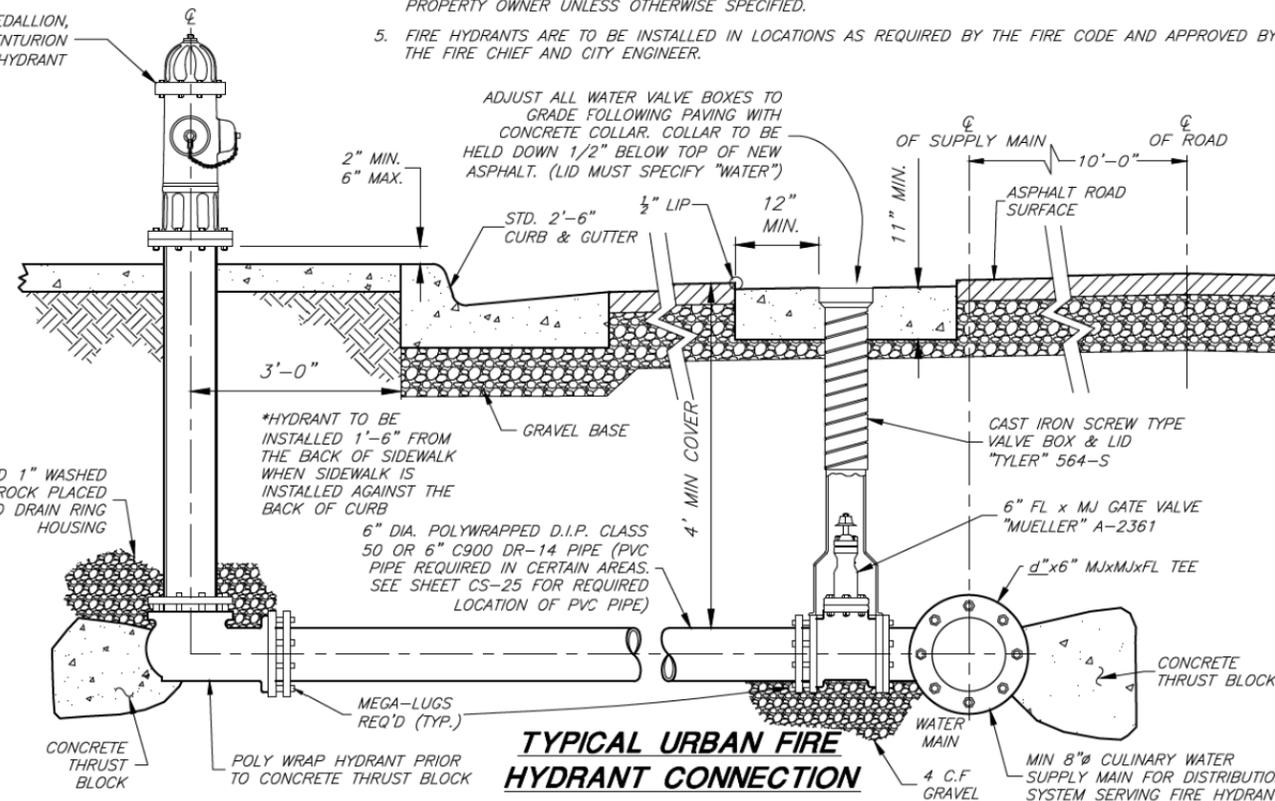
- TRANSITION COUPLING; "ROMAC" MODEL 501
- MJ 45° BEND W/RETAINER GLANDS
- CONSTRUCT THRUST BLOCKS AT EACH 45° BEND W/(3) #6 REBARS SECURING BLOCK TO FITTING (EPOXY COATING)
- MINIMUM OF 12" COVER BETWEEN THE WATERLINE AND CONFLICTING UTILITY LINE TO BE CROSSED, EXCEPT LOOPS INVOLVING SEWER MAINS WHERE A MINIMUM OF 18" COVER IS REQUIRED.

TYPICAL WATERLINE LOOP

FIRE LINE NOTES:

- NO WATER SERVICE OR FIRE LINES TO BUILDINGS ARE PERMITTED TO CONNECT TO AUXILIARY LINES SERVICING FIRE HYDRANTS.
- COMMERCIAL FIRE LINES FROM THE MAIN TO BUILDING SHALL BE SEPARATE LINES AND NOT PART OF THE WATER SERVICE LATERAL.
- FIRE LINES ARE TO BE MAINTAINED BY THE PROPERTY OWNER UP TO THE VALVE AT THE MAIN. THE CITY SHALL OWN AND MAINTAIN THE FIRE SUPPRESSION LINE VALVE AT THE MAIN.
- FIRE HYDRANTS AND FIRE LINES ON PRIVATE PROPERTY SHALL BE OWNED AND MAINTAINED BY THE PROPERTY OWNER UNLESS OTHERWISE SPECIFIED.
- FIRE HYDRANTS ARE TO BE INSTALLED IN LOCATIONS AS REQUIRED BY THE FIRE CODE AND APPROVED BY THE FIRE CHIEF AND CITY ENGINEER.

"CLOW" MEDALLION, "MUELLER" CENTURION OR "EJCO" FIRE HYDRANT



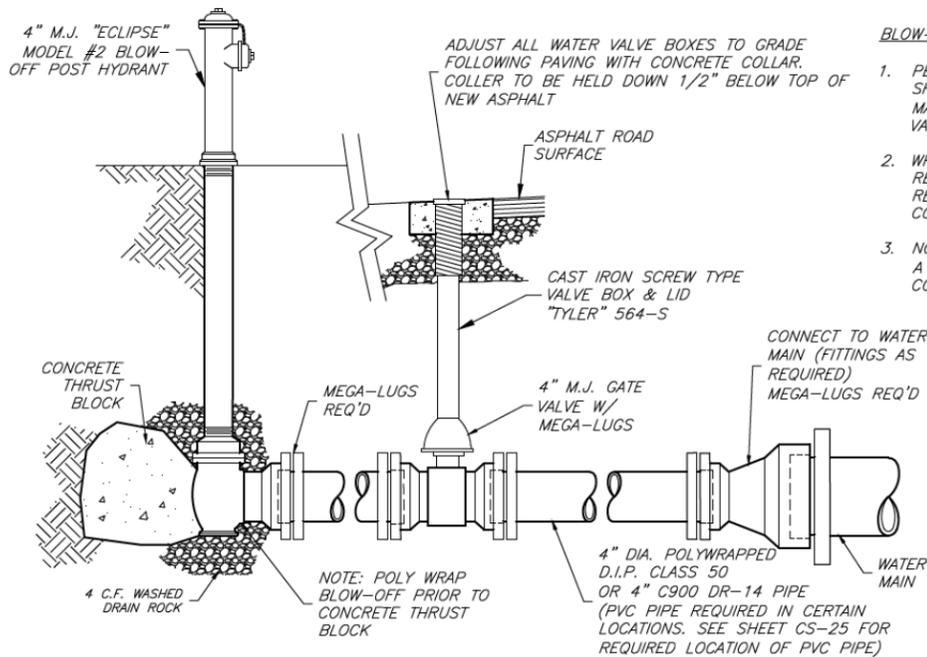
TYPICAL URBAN FIRE HYDRANT CONNECTION

BLOW-OFF NOTES:

- PERMANENT BLOW-OFFS SHALL BE 4" AS SHOWN BELOW. TEMPORARY BLOW-OFFS MAY BE 2" WITH 2" POLY AND 2" GATE VALVE WITH VALVE BOX AT MAIN.
- WHEN TEMPORARY BLOW-OFFS ARE REMOVED THE MAIN SHALL ALSO BE REMOVED WHERE THE BLOW-OFF IS CONNECTED.
- NO TAPS ARE ALLOWED ON THE MAIN. USE A CAP W/ THREADED CORP STOP CONNECTION.

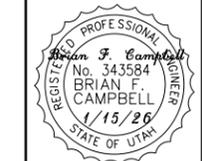
GENERAL NOTES:

- THE USE OF "BLUE" BOLTS AND NUTS IS APPROVED BY THE CITY
- ALL WATER MAIN AND HYDRANT GATE VALVES TO BE "MUELLER" 350 PSI RESILIENT WEDGE A-2361 VALVES
- ALL SPECIFIED BRANDS OF MATERIALS SHOWN ON THESE DRAWINGS ARE "CITY STANDARDS." OTHER EQUIVALENT BRANDS MAY BE USED WITH THE PRIOR APPROVAL OF THE CITY ENGINEER AND THE CITY WATER DEPARTMENT SUPERINTENDENT.



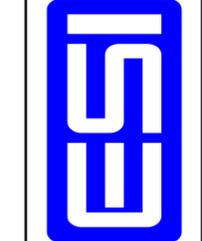
TYPICAL FLUSH VALVE CONNECTION

REVISIONS	DATE	APPROVED BY	REMARKS



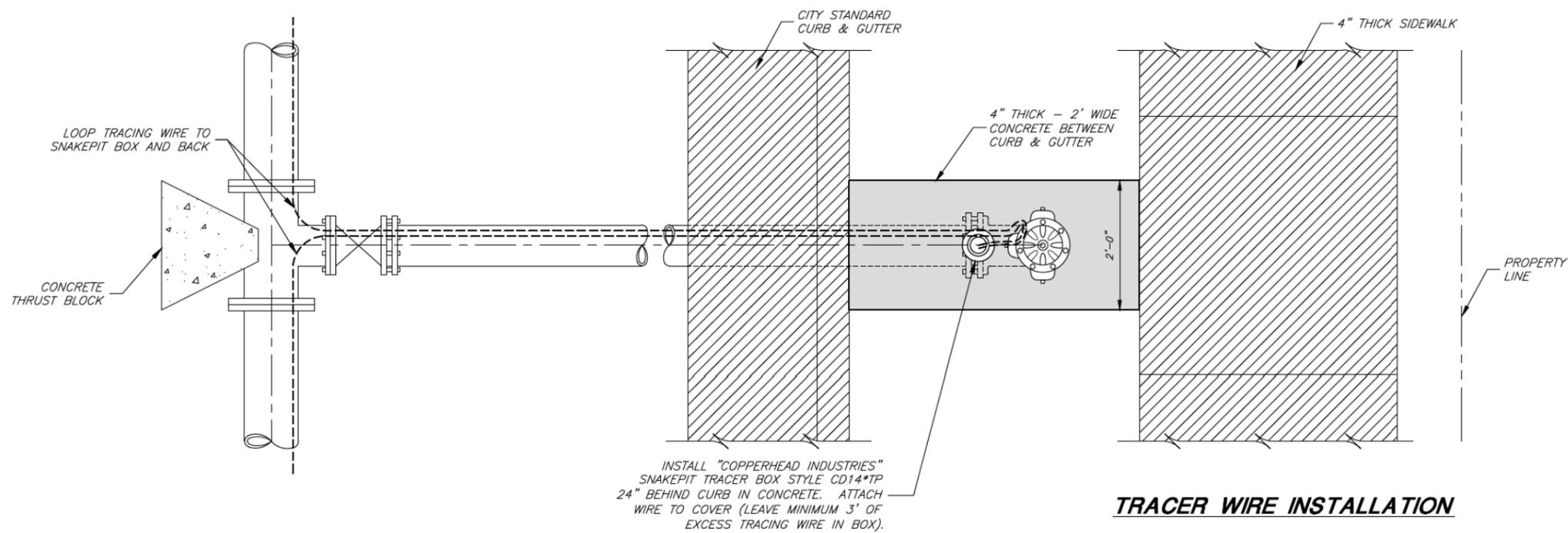
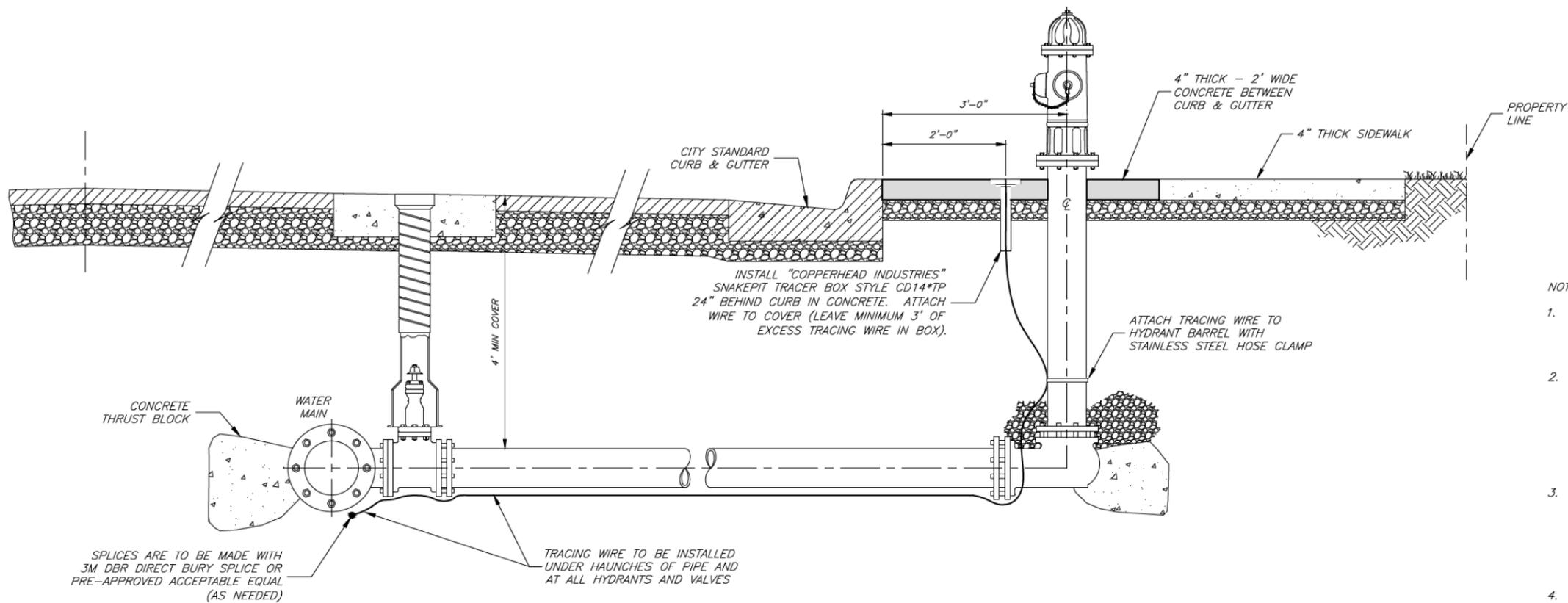
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NORTH OGDEN CITY
 450 EAST WIDENING
 PROJECT PHASE 2
 STANDARD DETAILS

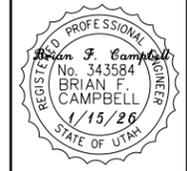
SHEET NO.	24
SHEET TYP.	DT-03
PROJ. NO.	24-131



NOTES:

1. ALL WATERLINES SHALL HAVE A MINIMUM 12 GA. INSULATED TRACING WIRE INSTALLED UNDER THE HAUNCHES OF THE PIPE PRIOR TO BACKFILLING.
2. TRACING WIRES SHALL TERMINATE AT ALL FIRE HYDRANTS. AT SERVICE SADDLES AND TAPPING SLEEVES, THE TRACING WIRE SHALL NOT BE ALLOWED TO BE PLACED BETWEEN THE SADDLE AND THE PIPE. A GROUNDING ROD SHALL BE INSTALLED AT ALL TRACER SYSTEM TERMINAL POINTS.
3. TRACING WIRE SHALL BE COPPER WIRE WITH BLUE INSULATION RATED FOR DIRECT BURIAL. ALL WIRE CONNECTORS SHALL BE 3M DBR DIRECT BURY SPLICE OR PRE-APPROVED ACCEPTABLE EQUAL AND SHALL BE WATERTIGHT TO PROVIDE ELECTRICAL CONTINUITY.
4. ALL TRACING WIRE SHALL BE TESTED FOR CONTINUITY IN THE PRESENCE OF THE PUBLIC WORKS INSPECTOR PRIOR TO ASPHALT PLACEMENT. ANY TRACING WIRE FOUND NOT TO BE CONTINUOUS AFTER TESTING SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR PRIOR TO ASPHALT PLACEMENT.

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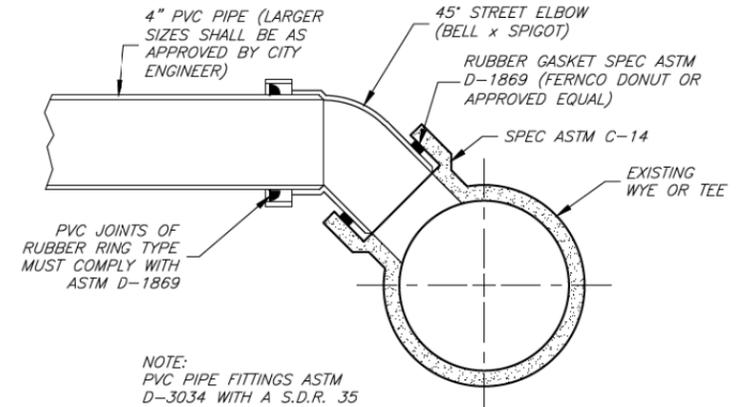


NORTH OGDEN CITY
 450 EAST WIDENING
 PROJECT PHASE 2
STANDARD DETAILS

SHEET NO.	25
SHEET TYP.	DT-04
PROJ. NO.	24-131

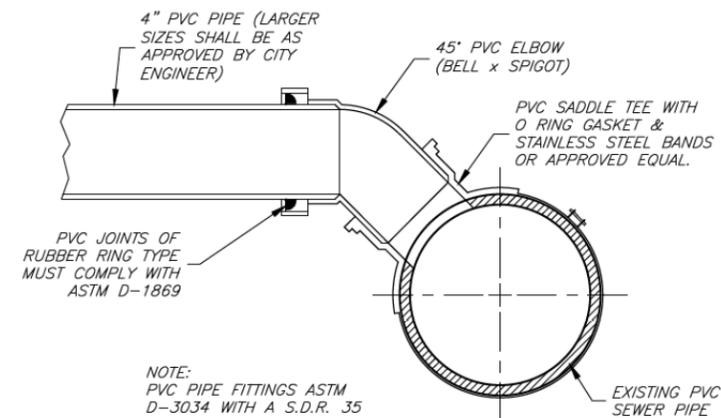
GENERAL NOTES:

1. ALL SANITARY SEWER LATERAL CONNECTIONS ON SEWER MAINS IN NEW SUBDIVISIONS SHALL BE MADE WITH IN LINE PRE-FORMED WYES OR TEES UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
2. FLOWLINE ELEVATION OF LATERALS SHALL EQUAL THE INSIDE TOP OF PIPE ON MAINLINE AT THE CONNECTING POINT.
3. ALL MAIN LINES MUST BE A MINIMUM OF 8" DIAMETER PIPE.
4. PVC SANITARY SEWER MAIN LINES SHALL BE "GREEN" IN COLOR. LAND DRAIN LINES ARE "WHITE" IN COLOR. IRRIGATION PIPES SHALL BE "PURPLE" IN COLOR. CONTRACTOR TO VERIFY EXISTING PIPE PRIOR TO MAKING ANY CONNECTION
5. ALL SANITARY SEWER LINES SHALL BE AIR TESTED AND INSPECTED BY MEANS OF VIDEO CAMERA WHEN CONSTRUCTED.
6. SANITARY SEWER LATERALS AND MAINS SHALL HAVE GREEN WARNING TAPE AND GREEN TRACER WIRE FOR LOCATING PURPOSES.
7. SANITARY SEWER SERVICE LATERAL CONNECTIONS SHALL NOT BE ALLOWED IN SEWER MANHOLES.
8. SEWER LINES SHALL BE CONSTRUCTED INSIDE OF THE RIGHT-OF-WAY.
9. THE LOCATION OF NEW SEWER LATERALS MUST BE DOCUMENTED AND SUBMITTED TO THE CITY ON SCALED AS-BUILT DRAWINGS.
10. SEWER LATERALS ARE THE RESPONSIBILITY OF THE INDIVIDUAL OWNER TO THE MAIN.
11. CLEANOUTS ARE NOT ALLOWED ON SEWER MAINS. MAINS TO BE TERMINATED WITH A CITY STANDARD MANHOLE.
12. INSERTA TEE PRODUCT IS NOT APPROVED BY THE CITY.
13. ALL CULINARY WATER MAINS AND SERVICES MUST MAINTAIN A MINIMUM SEPARATION FROM ALL SEWER MAINS AND LATERALS OF 10'-0" HORIZONTAL AND 18" VERTICAL (WITH THE WATER MAIN ABOVE THE SEWER MAIN) IN ACCORDANCE WITH THE STATE OF UTAH DIVISION OF DRINKING WATER RULES SECTION R309-550-7
14. ALL SANITARY SEWER LINES SHALL BE AIR TESTED AND INSPECTED BY MEANS OF VIDEO CAMERA FOLLOWING CONSTRUCTION. PRIOR TO VIDEO, PIPE SHALL BE FLUSHED WITH A PRESSURIZED CLEANING TRUCK. ALL WATER & DEBRIS SHALL BE SUCKED OUT & REMOVED FROM THE LOW END MANHOLE. CONNECTIONS TO EXISTING SEWER LINES SHALL BE BLOCKED TO PREVENT FLUSHED DEBRIS FROM ENTERING SEWER. CLEAN WATER SHALL BE ADDED TO THE LINE WHILE RECORDING TO HELP IDENTIFY FLOW CONDITIONS. AFTER CORRECTING PROBLEMS, PIPES SHALL BE RE-INSPECTED BY THE SAME PROCEDURE. VIDEO RECORDINGS TO BE DELIVERED TO THE CITY.
15. ALL WORK WITHIN THE CITY'S RIGHT OF WAY TO BE PERFORMED BY A LICENSED CONTRACTOR W/ ALL APPLICABLE PERMITS.



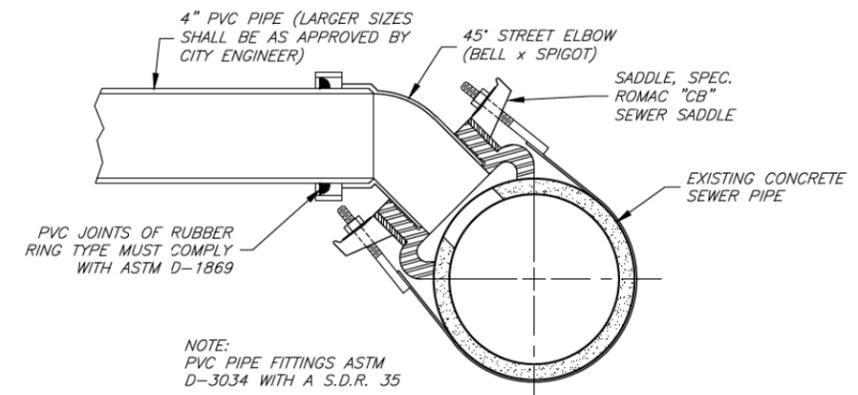
NOTE:
PVC PIPE FITTINGS ASTM
D-3034 WITH A S.D.R. 35

**CONNECTING INTO
EXISTING WYE OR TEE**



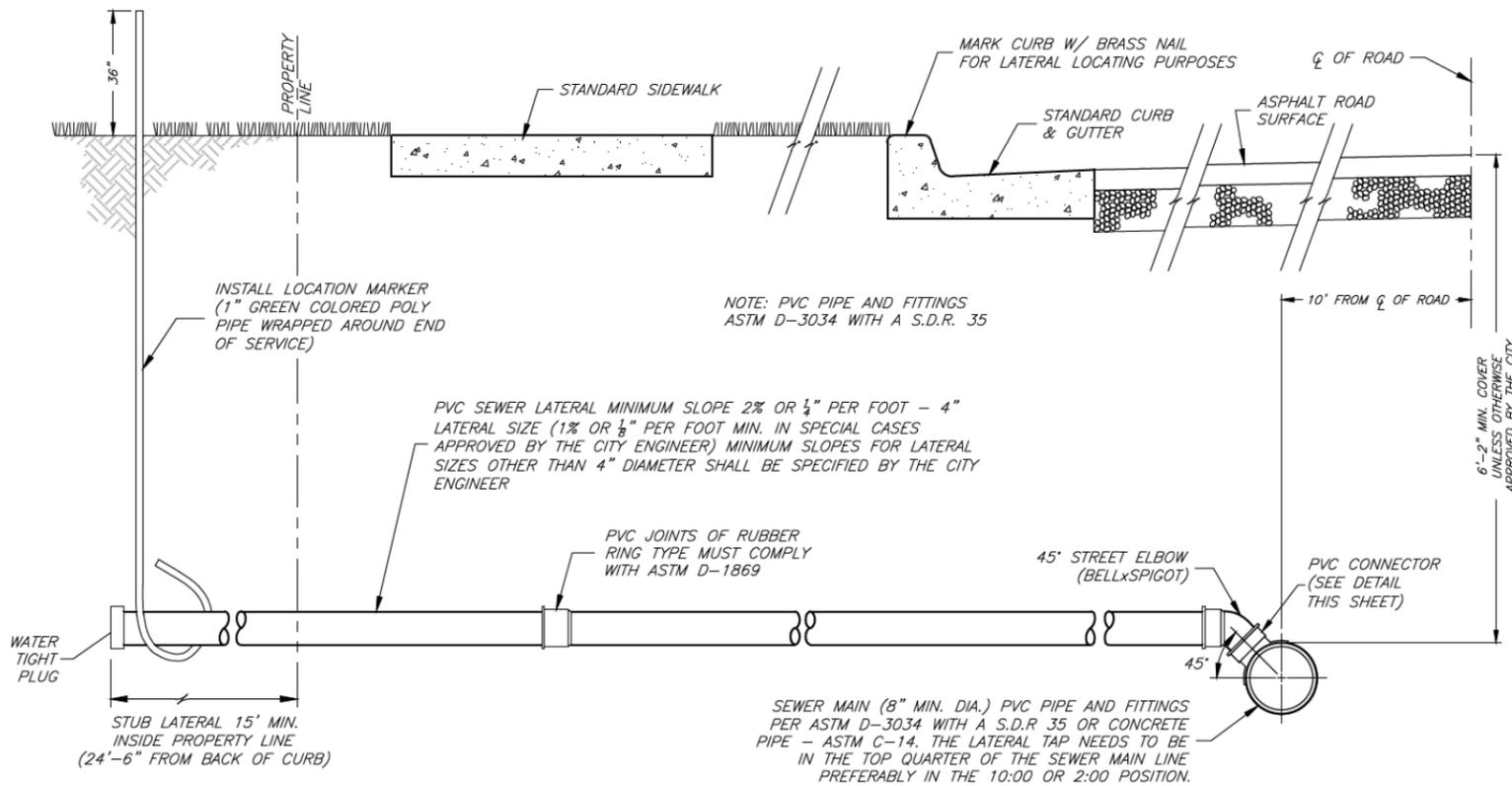
NOTE:
PVC PIPE FITTINGS ASTM
D-3034 WITH A S.D.R. 35

**TAPPING INTO
EXISTING PVC PIPE**



NOTE:
PVC PIPE FITTINGS ASTM
D-3034 WITH A S.D.R. 35

**TAPPING INTO
EXISTING CONCRETE PIPE**



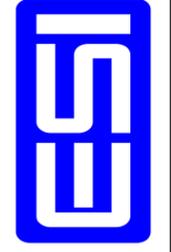
TYPICAL SEWER LATERALS CONNECTION

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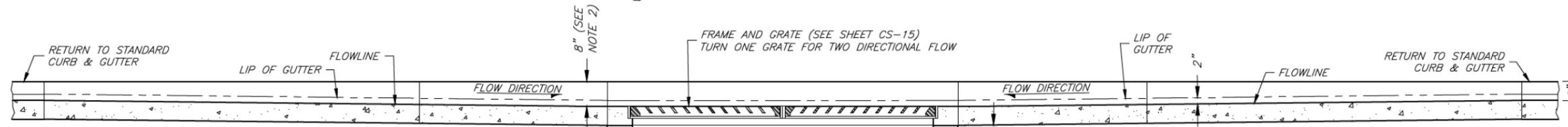
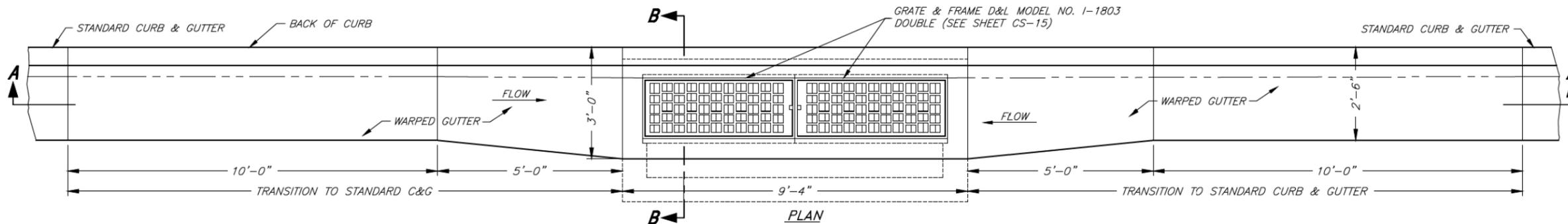


NORTH OGDEN CITY
450 EAST WIDENING
PROJECT PHASE 2
STANDARD DETAILS

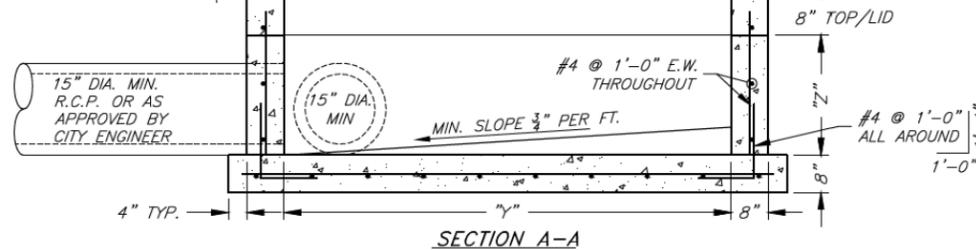
SHEET NO. 26

SHEET TYP. DT-05

PROJ. NO. 24-131



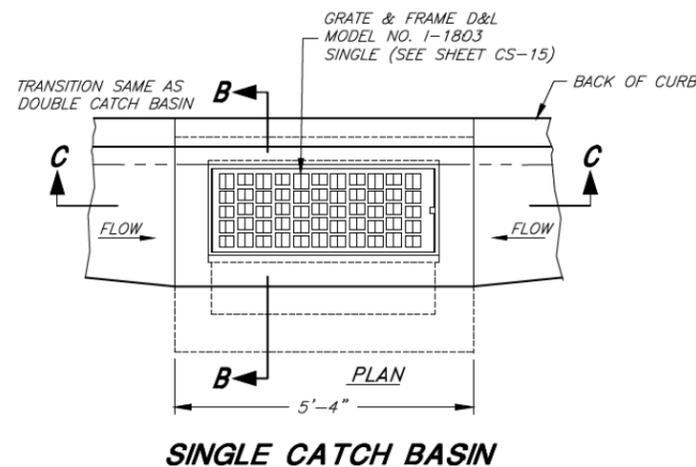
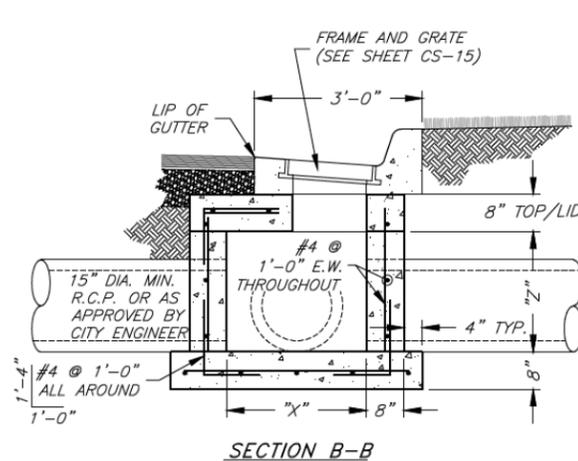
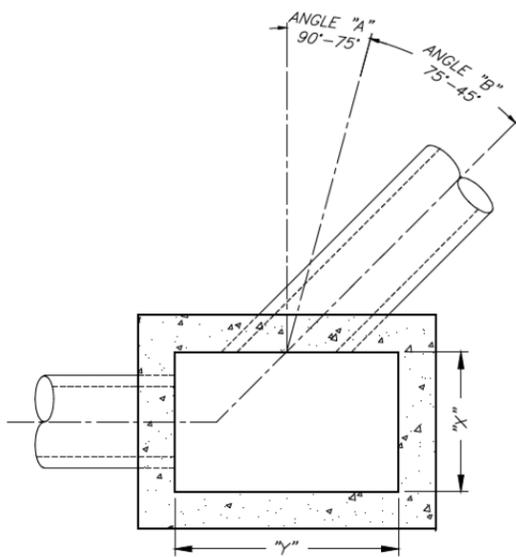
PIPE SIZE (IN.)	"X"	SINGLE CATCH BASIN		DOUBLE "Y"	"Z" MIN.
		(ANGLE A)	(ANGLE B)		
15	2'-6"	4'-0"	4'-0"	8'-0"	2'-0"
18	2'-6"	4'-0"	4'-0"	8'-0"	2'-6"
21	4'-0"	4'-0"	4'-0"	8'-0"	3'-0"
24	4'-0"	4'-0"	5'-0"	8'-0"	3'-0"
30	4'-0"	4'-0"	6'-0"	8'-0"	3'-6"
36	4'-0"	5'-0"	6'-0"	8'-0"	4'-0"
42	6'-0"	6'-0"	7'-0"	8'-0"	5'-0"
48	6'-0"	6'-0"	8'-0"	8'-0"	5'-6"



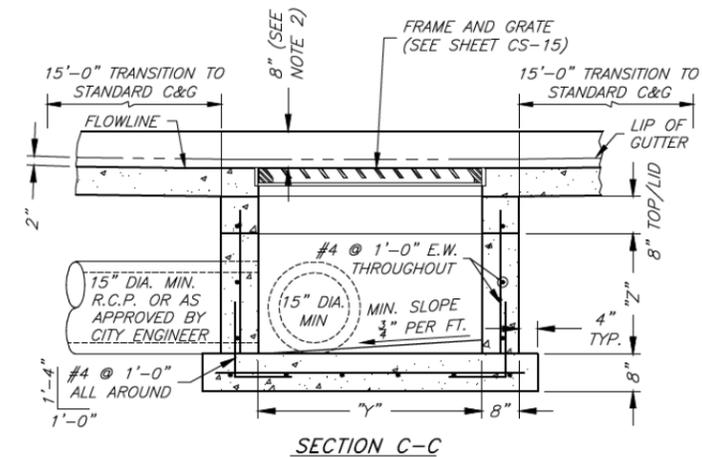
DOUBLE CATCH BASIN

NOTES:

1. ALL CATCH BASIN BOX SIZES REFLECT DIMENSIONS FOR THE MINIMUM 15" PIPE SIZE. BOX DIMENSIONS MUST INCREASE PROPORTIONALLY TO ACCOMMODATE LARGER PIPE SIZES.
2. DEPTH MAY VARY FROM 6" TO 10" AS DIRECTED BY THE CITY ENGINEER
3. CAST-IN-PLACE CONCRETE CATCH BASINS CAN BE REPLACED WITH PRECAST CONCRETE CATCH BASINS WITH HS-20 DECK LOADING AND COMPARABLE SIZE.
4. ALL BOXES SHALL BE FORMED ON THE INSIDE AND OUTSIDE OF THE BOX AND INSPECTED BY THE CITY PRIOR TO THE PLACING OF CONCRETE.
5. DOUBLE CATCH BASINS WILL BE REQUIRED IN LOCATIONS SPECIFIED BY THE CITY ENGINEER (TYPICALLY IN LOW SPOTS OR WHERE ADDITIONAL INLET CAPACITY IS NEEDED).

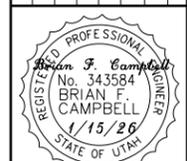


SINGLE CATCH BASIN



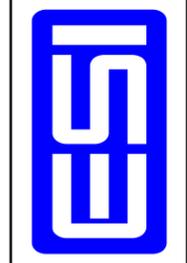
SECTION C-C

REVISIONS	NO.	DATE	APPROVED BY	REMARKS



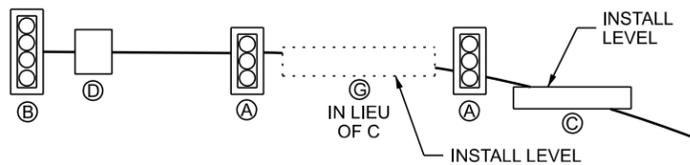
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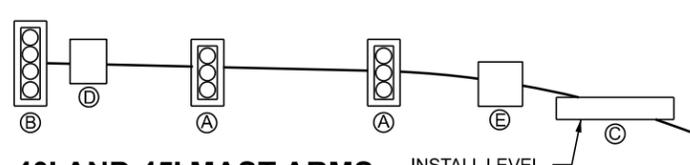
NORTH OGDEN CITY
 450 EAST WIDENING
 PROJECT PHASE 2
 STANDARD DETAILS

SHEET NO.	27
SHEET TYP.	DT-06
PROJ. NO.	24-131



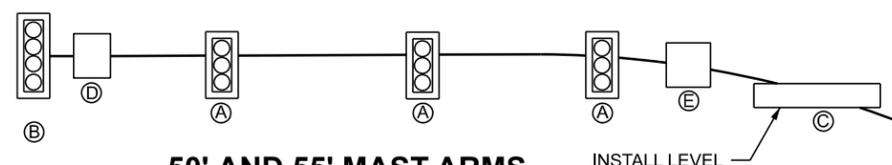
**30' AND 35' MAST ARMS
MAXIMUM LOADING**

(SEE NOTES 7 AND A)



**40' AND 45' MAST ARMS
MAXIMUM LOADING**

(SEE NOTES 7 AND A)

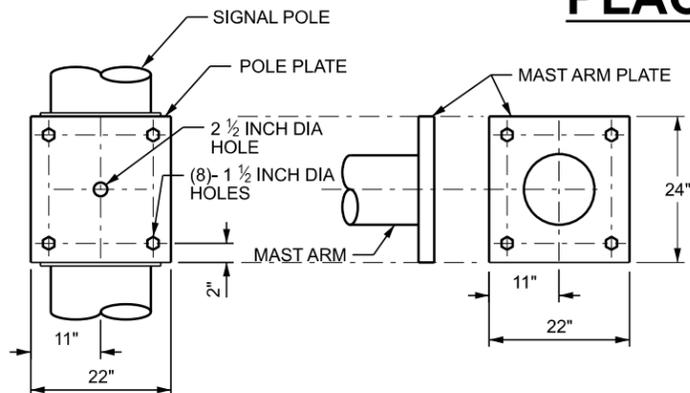


**50' AND 55' MAST ARMS
MAXIMUM LOADING**

(SEE NOTES 7 AND A)

FIELD CUT END OF MAST ARM IF 25 FOOT MAST ARM LENGTH IS REQUIRED. INSTALL CUSTOM ARM END CAP.

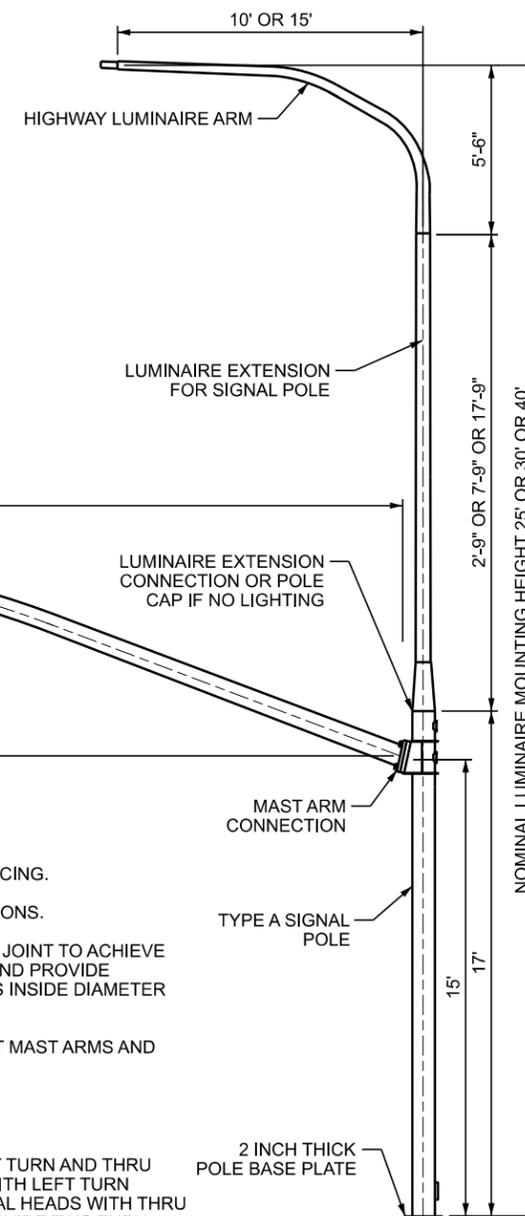
**TYPICAL SIGNAL HEAD & SIGN
PLACEMENT FOR MAXIMUM LOADING**



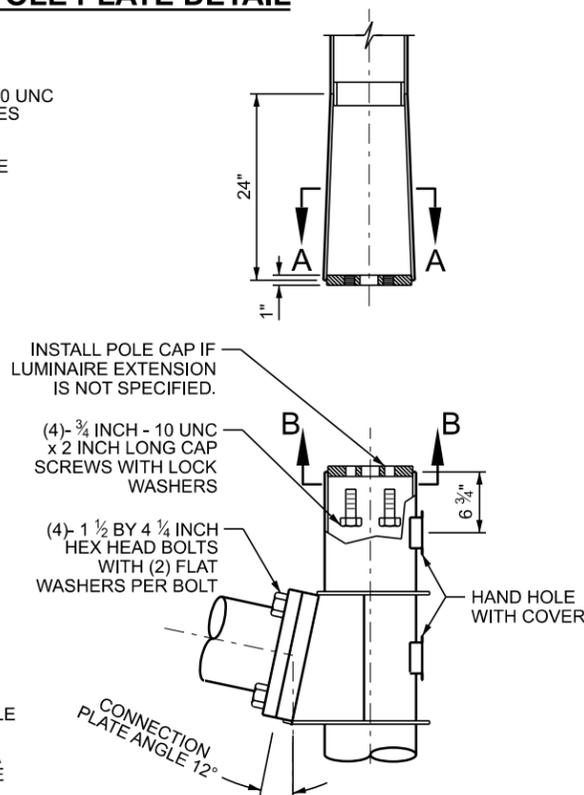
**30' TO 55' MAST ARM AND
POLE PLATE DETAIL**

DEVICE	DESCRIPTION/SIZE	MAXIMUM PROJECTED AREA (SF)	*MAXIMUM WEIGHT (LBS)	MOUNTING
(A) SIGNAL	12", 3-SECTION WITH BACK PLATE	8.7	55	BRACKET
(B) SIGNAL	12", 4-SECTION WITH BACK PLATE	11.1	72	BRACKET
(C) SIGN	STREET SIGN 18" x 96", OR 30" X 60"	12.5	24	OPTION A
(C) SIGN	STREET SIGN 24" x 120", (MAX) OR 18" X 96", OR 30" x 60"	20.0	38	OPTION B
(D) SIGN	SIGN 30" x 36" (MAX)	7.5	15	OPTION A
(E) SIGN	BLANKOUT SIGN 36" x 36" (MAX)	9.0	80	BRACKET

* DOES NOT ACCOUNT FOR PROGRAMMABLE HEADS. SEE NOTE A.



SECTION A-A



**30' TO 55'
MAST ARM POLE EXTENSION
AND CONNECTION DETAIL**

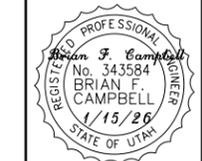
GENERAL NOTES:

- SIGNAL POLE, MAST ARM, LUMINAIRE EXTENSION, FOUNDATION ANCHOR BOLTS, AND RELATED HARDWARE ARE STATE FURNISHED ITEMS.
- ALL STEEL MATERIALS INCLUDING ANCHOR BOLTS ARE HOT-DIPPED GALVANIZED. AVOID DAMAGING THE GALVANIZED FINISH OF MATERIALS DURING TRANSPORT AND PLACEMENT. DELIVER THE STEEL TO THE POWDER COATING FACILITY THEN TO THE PROJECT SITE IF STEEL MATERIALS ARE TO BE POWDER COATED.
- INSTALL SIGNAL POLE TO BE PLUMB AFTER MAST ARM IS ATTACHED. RAKE POLE TO LEVEL MAST ARM. DO NOT RAKE THE SIGNAL POLE TO INCREASE SIGNAL HEAD CLEARANCE.
- THE CLEARANCE BETWEEN ALL MAST ARM MOUNTED DEVICES AND THE ROADWAY SURFACE MUST BE BETWEEN 18.5 FT AND 21 FT. A 17.5 FT CLEARANCE IS ALLOWED WITH APPROVAL FROM THE REGION TRAFFIC OPERATIONS ENGINEER.
- MOUNT ALL SIGNAL HEAD ASSEMBLIES AT THE SAME BOTTOM ELEVATION +/- 2 INCHES FOR EACH MAST ARM.
- PROVIDE SIGNAL HEAD BRACKET MOUNT FOR ATTACHING SIGNAL HEADS AND SIGNS TO MAST ARM.
- REFER TO THE PLANS FOR SIGNAL HEAD SPACING. PROVIDE 8 FT MINIMUM SPACING BETWEEN SIGNAL HEADS FOR NON-TYPICAL INSTALLATIONS.
- FIELD ASSEMBLE TWO-PIECE MAST ARM SLIP JOINT TO ACHIEVE A SNUG FIT. APPLY ANTI-SEIZE COMPOUND AND PROVIDE MINIMUM OVERLAP NOT LESS THAN 1.5 TIMES INSIDE DIAMETER OF END SECTION.
- RISE EQUALS 5 FT- 6 INCH FOR 30 FT TO 45 FT MAST ARMS AND 6 FT FOR 50 FT TO 55 FT MAST ARMS.

DESIGN-ONLY NOTES:

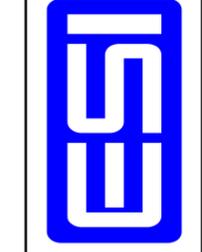
- PROVIDE ONE SIGNAL HEAD FOR EACH LEFT TURN AND THRU LANE. CENTER LEFT TURN SIGNAL HEADS WITH LEFT TURN APPROACH LANES AND CENTER THRU SIGNAL HEADS WITH THRU ACCEPTANCE LANES WHERE POSSIBLE. PROVIDE TWO THRU HEADS SPACED AT 8 FT TO 10 FT FOR ONE THRU LANE ROADWAYS. CONTACT THE ENGINEER FOR LOADING APPROVAL IF MAST ARM LOADING EXCEEDS LOADING SHOWN OR IF USING PROGRAMMABLE SIGNAL HEADS.

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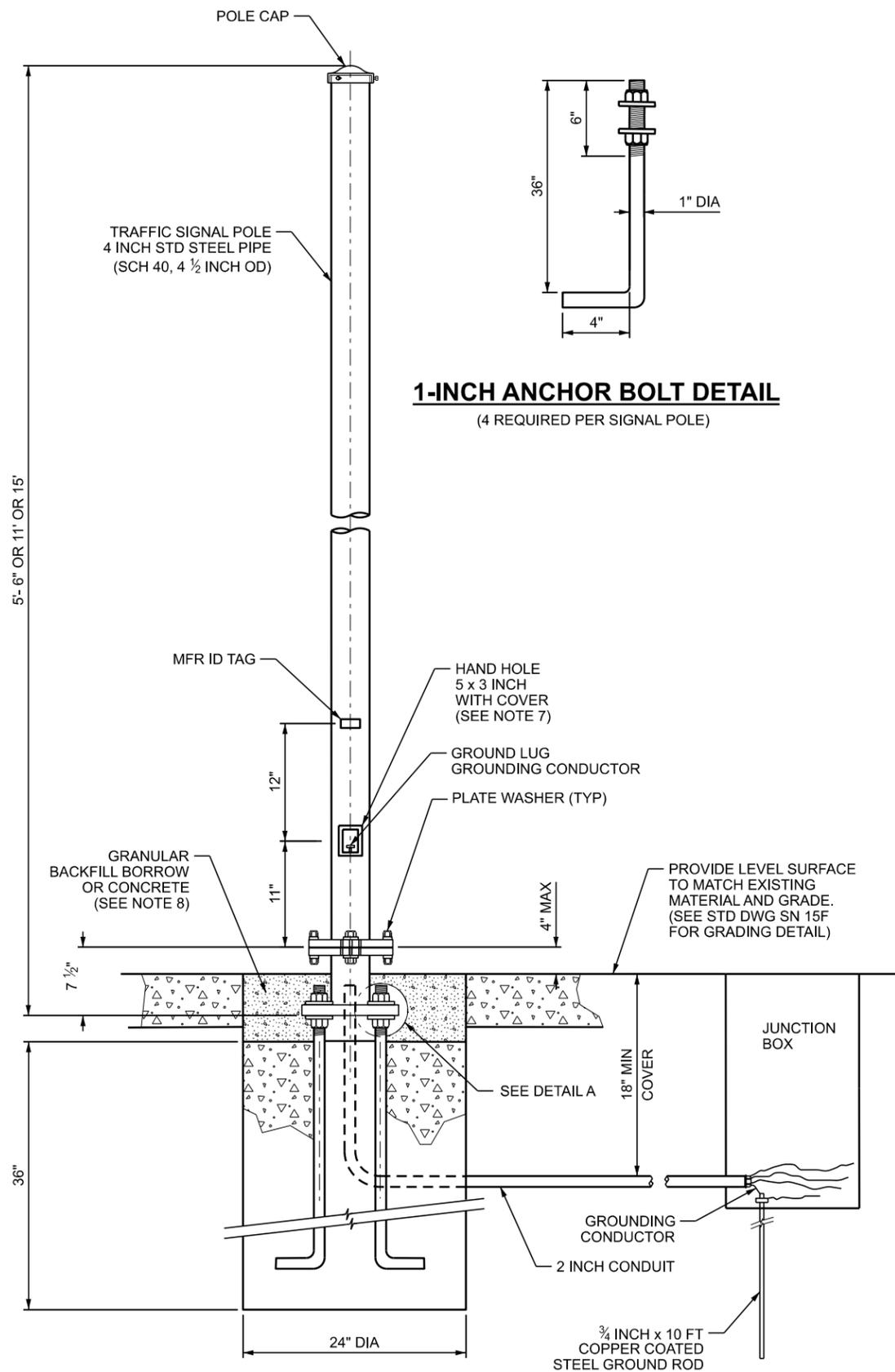
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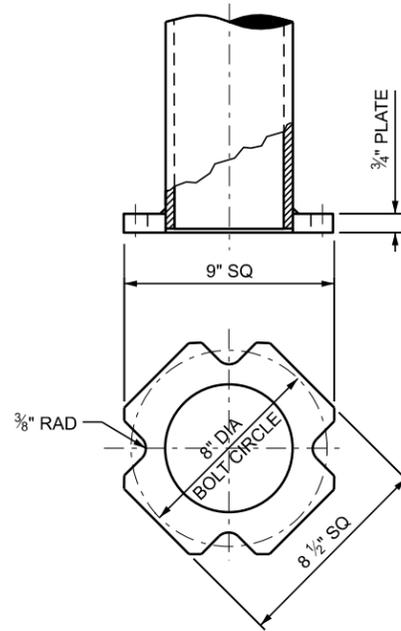
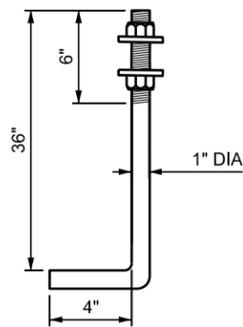


NORTH OGDEN CITY
450 EAST WIDENING
PROJECT PHASE 2
SIGNAL DETAIL

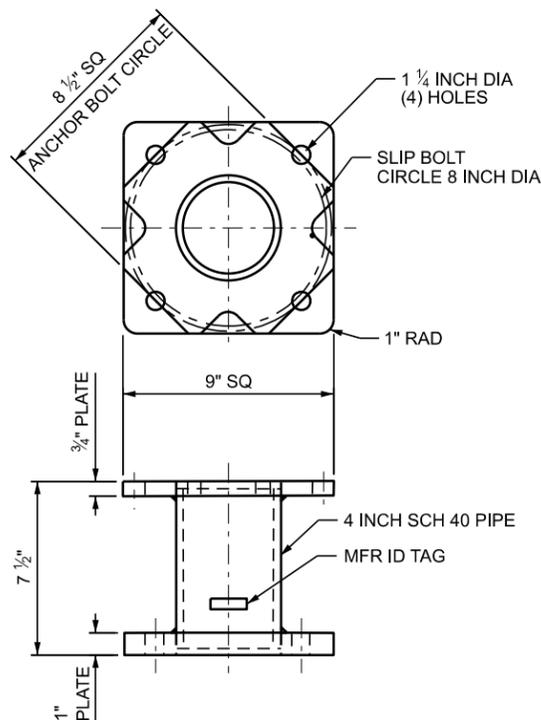
SHEET NO. 29
SHEET TYP. SGGT-01
PROJ. NO. 24-131



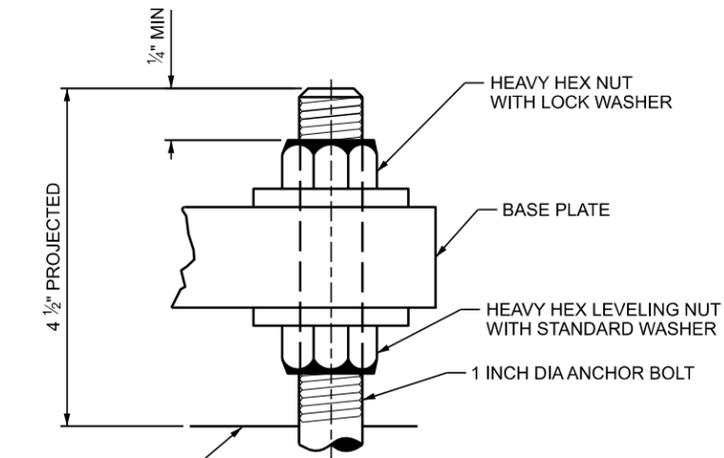
1-INCH ANCHOR BOLT DETAIL
(4 REQUIRED PER SIGNAL POLE)



POLE BASE



GROUND BASE



DETAIL A

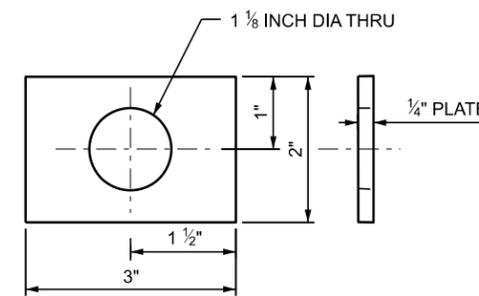


PLATE WASHER
FOR SLIP BASE BOLTS
(2 REQUIRED EACH BOLT)

NOTES:

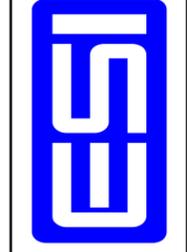
1. TRAFFIC SIGNAL POLE, SLIP BASE, FOUNDATION ANCHOR BOLTS, AND RELATED HARDWARE ARE STATE FURNISHED ITEMS.
2. ALL STEEL MATERIALS INCLUDING ANCHOR BOLTS ARE HOT-DIPPED GALVANIZED. AVOID DAMAGING THE GALVANIZED FINISH OF MATERIALS DURING TRANSPORT AND PLACEMENT.
3. USE CLASS AA(AE) CAST-IN-PLACE CONCRETE FOR FOUNDATION. CAP CONDUIT ON BOTH ENDS PRIOR TO PLACING CONCRETE.
4. USE STATE FURNISHED 5/8 x 3 INCH SLIP BOLTS. TORQUE EACH BOLT TO 80 FT-LBS. RELEASE AND RE-TORQUE TO 70 FT-LBS.
5. SEE STD DWG SN 15F FOR BREAKAWAY SUPPORT STUB HEIGHT MEASUREMENT.
6. ORIENT SIGNAL POLE SUCH THAT A TECHNICIAN FACING THE HAND HOLE WILL FACE THE ROADWAY OR ONCOMING TRAFFIC.
7. MATCH EXISTING SURFACE IF SURROUNDING MATERIAL IS NOT CONCRETE. USE GRANULAR BACKFILL BORROW, IF FOUNDATION IS NOT SURROUNDED BY SURFACE TREATMENT, FROM TOP OF FOUNDATION TO FINISHED GRADE.

REVISIONS	NO.	DATE	APPROVED BY	REMARKS



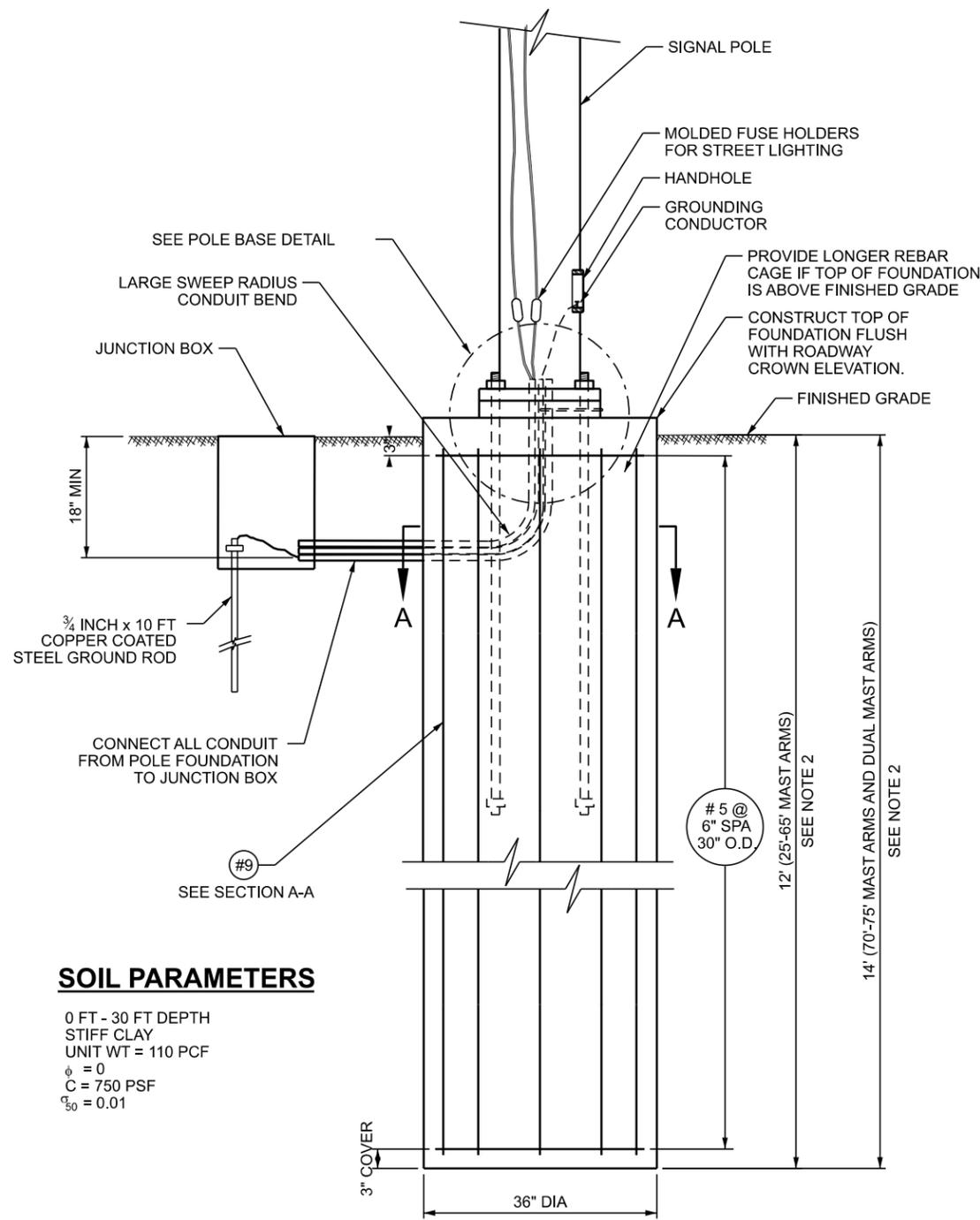
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NORTH OGDEN CITY
450 EAST WIDENING
PROJECT PHASE 2
SIGNAL DETAIL

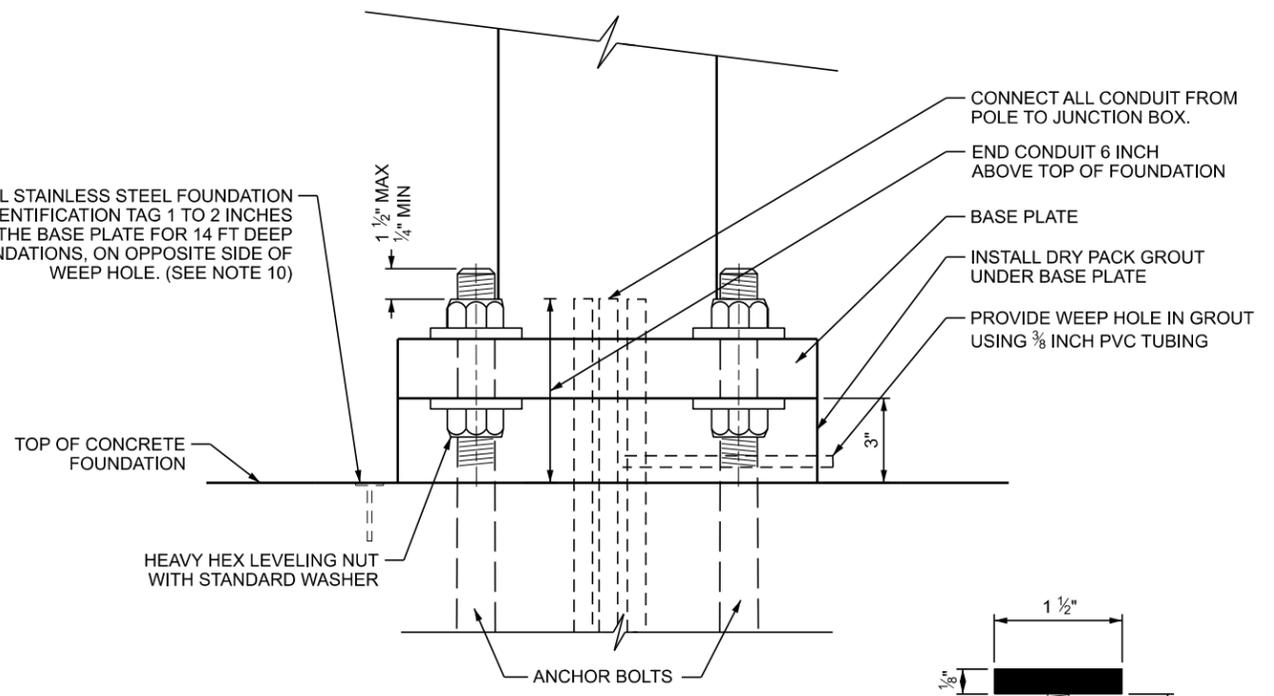
SHEET NO.	30
SHEET TYP.	SGDT-02
PROJ. NO.	24-131



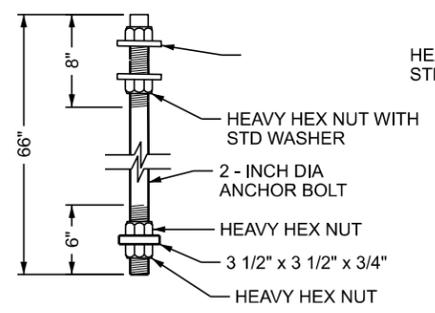
SOIL PARAMETERS
 0 FT - 30 FT DEPTH
 STIFF CLAY
 UNIT WT = 110 PCF
 $\phi = 0$
 $C = 750$ PSF
 $\gamma_{30} = 0.01$

POLE FOUNDATION

INSTALL STAINLESS STEEL FOUNDATION DEPTH IDENTIFICATION TAG 1 TO 2 INCHES FROM THE BASE PLATE FOR 14 FT DEEP FOUNDATIONS, ON OPPOSITE SIDE OF WEEP HOLE. (SEE NOTE 10)

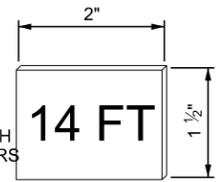


POLE BASE DETAIL

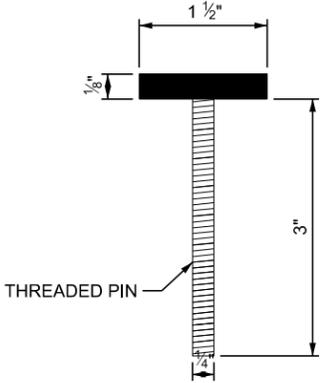


2-INCH ANCHOR BOLT DETAIL
 (4 REQUIRED PER SIGNAL POLE)

FOUNDATION DEPTH IDENTIFICATION TAG
 TOP VIEW

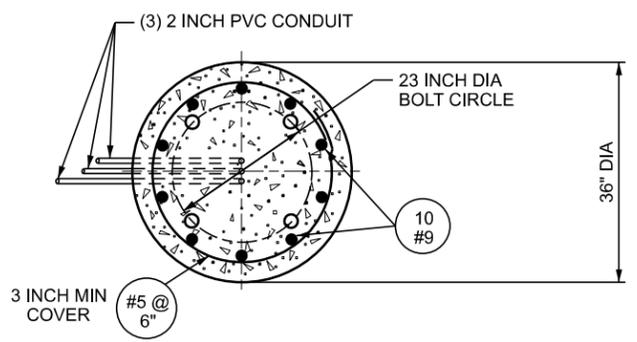


FOUNDATION DEPTH IDENTIFICATION TAG
 ELEVATION VIEW



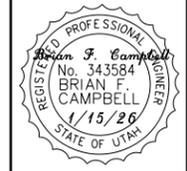
NOTES:

1. USE STATE FURNISHED 2 x 66 INCH ANCHOR BOLTS. TIGHTEN EACH BOLT TO SNUG-TIGHT PLUS 1/8 TURN. DO NOT WELD ANCHOR BOLT TO THE REINFORCING STEEL.
2. CAST FOUNDATIONS IN PLACE AGAINST UNDISTURBED EARTH. 12 FT FOUNDATIONS WILL HAVE 12 FT OF ITS LENGTH BELOW FINISH GRADE AND 14 FT FOUNDATIONS WILL HAVE 14 FT OF ITS LENGTH BELOW FINISH GRADE. USE A CIRCULAR FORM FOR THE TOP 18 INCHES OF FOUNDATION EMBEDMENT.
3. DO NOT WELD REINFORCING STEEL.
4. PLACE ALL CONDUIT IN SAME TRENCH WHERE POSSIBLE.
5. USE COATED REBAR AND CLASS AA(AE) CONCRETE FOR FOUNDATION.
6. CAP CONDUIT ON BOTH ENDS PRIOR TO FOUNDATION POUR.
7. FOUNDATION MAY BE A MAXIMUM OF 18 INCHES ABOVE THE CROWN IF ROADWAY IS A HIGH LOAD ROUTE.
8. PROVIDE MINIMUM 10 FT HORIZONTAL EDGE-TO-EDGE CLEARANCE BETWEEN SIGNAL MAST ARM FOUNDATIONS.
9. PROVIDE AND INSTALL FOUNDATION DEPTH IDENTIFICATION TAG IN FOUNDATIONS 14 FT DEEP. INSTALL 1 TO 2 INCHES FROM THE BASE PLATE AS SHOWN. DRILL HOLE AND INSTALL TAG IN EPOXY FILLED MEDIUM 24 HOURS AFTER CONCRETE IS PLACED IF TAG IS NOT INSTALLED DURING CONCRETE PLACEMENT.
10. CONSTRUCT TOP OF FOUNDATION ELEVATION TO MATCH ELEVATION AT BACK OF SIDEWALK; OR 2 PERCENT GRADE HIGHER THAN TBC; OR WITH THE ROADWAY CENTERLINE OVER WHICH THE MAST ARM WILL HANG, WHICHEVER IS HIGHEST.



SECTION A-A

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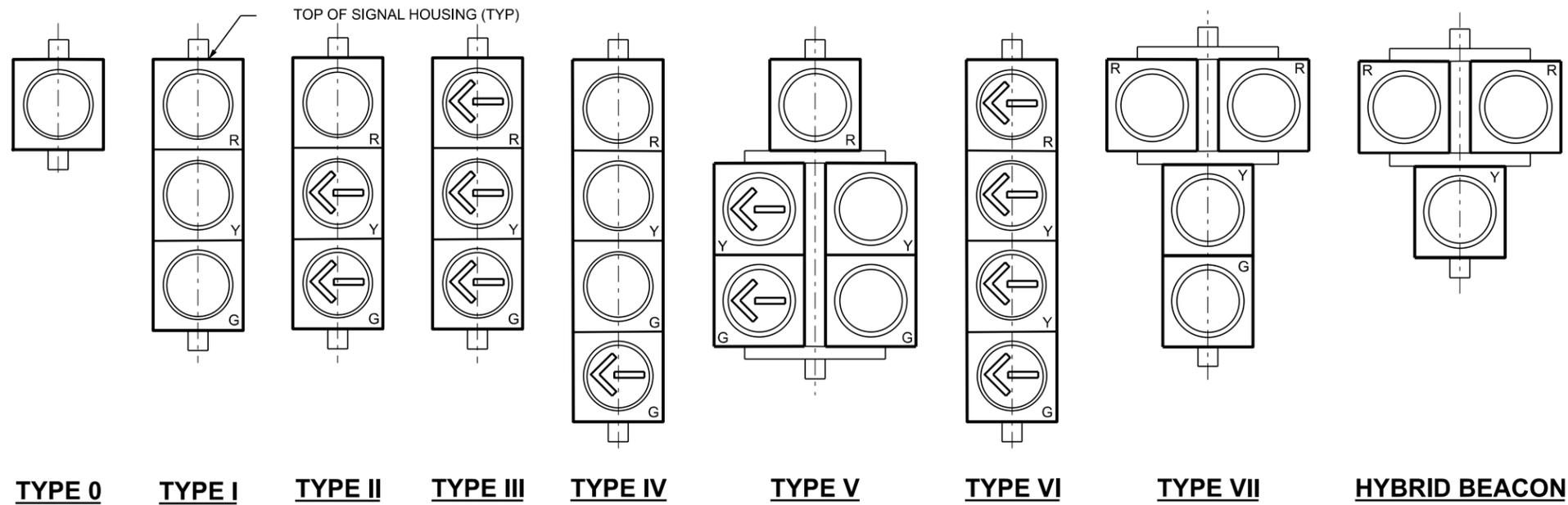


NORTH OGDEN CITY
 450 EAST WIDENING
 PROJECT PHASE 2
 SIGNAL DETAIL

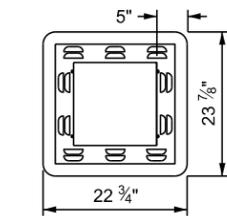
SHEET NO. 31

SHEET TYP. SGGT-03

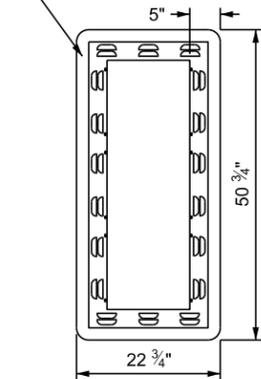
PROJ. NO. 24-131



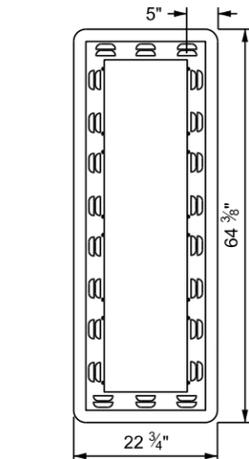
2 INCH RETROREFLECTIVE
FLUORESCENT YELLOW TAPE (TYP)
(SEE NOTES 8 & 9)



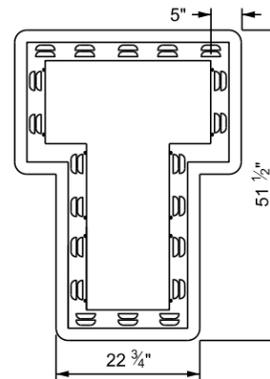
**BACKPLATE
FOR TYPE 0
SIGNAL HEAD**



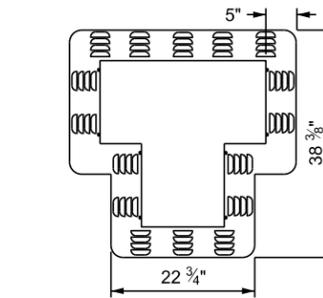
**BACKPLATE
FOR TYPE I, II, & III
SIGNAL HEAD**



**BACKPLATE
FOR TYPE IV, & VI
SIGNAL HEAD**



**BACKPLATE
FOR TYPE VII
SIGNAL HEAD**



**BACKPLATE
FOR HYBRID BEACON
SIGNAL HEAD**

LOUVERED BACKPLATE DETAILS

NOTES:

1. USE 12 x 12 INCH BALLCAP/CUTAWAY VISORS FOR TRAFFIC SIGNALS. USE FULL VISORS WHEN THE INTERSECTION IS SKEWED.
2. APPLY A BEAD OF SILICONE AROUND VISORS.
3. ALL EXTERIOR AND INTERIOR OF THE SIGNAL HOUSING, DOOR, AND OUTSIDE OF VISOR TO BE HIGHWAY YELLOW. INSIDE OF VISOR IS PAINTED FLAT BLACK. BOTH SIDES OF BACKPLATES PRIMED AND PAINTED FLAT BLACK.
4. LOCATE TERMINAL BLOCK IN TOP SECTION FOR TYPE I, II, III, IV, AND VI SIGNAL HEADS. REFER TO STD DWG SL 3C FOR WIRE PATH AND TERMINAL BLOCK LOCATIONS FOR TYPE V, TYPE VII, AND HYBRID BEACON SIGNAL HEADS.
5. INSTALL TYPE V, TYPE VII, AND HYBRID BEACON SIGNAL ASSEMBLIES SO THAT HINGED SIGNAL FACES SWING OPEN TO THE OUTSIDE.
6. ORIENT ALL LED LENSES FOR TOP UPWARD ALIGNMENT UNLESS OTHERWISE SPECIFIED ON PLAN SHEETS.
7. PROVIDE BACKPLATE FOR ALL TYPE 0, I, II, III, IV, VI, VII, HYBRID BEACON SIGNAL HEADS. PROVIDE BACKPLATE FOR TYPE V SIGNAL HEADS ONLY AS SPECIFIED.
8. INSTALL 2 INCH RETROREFLECTIVE YELLOW TAPE-ASTM TYPE XI AROUND OUTSIDE EDGE OF BACKPLATES EXCEPT AS STATED IN NOTE 9.
9. DO NOT APPLY RETROREFLECTIVE TAPE TO SIGNAL HEADS ON RAMP METERS, PEDESTRIAN HYBRID BEACONS, PEDESTRIAN FLASHING BEACONS, AWS, OR REDUCED SPEED SCHOOL ZONE ASSEMBLIES.
10. RIVETED ASSEMBLY OF MULTI-PIECE BACKPLATES IS REQUIRED.
11. ALL SIGNAL HEAD FUNCTIONS TO BE CONTROLLED BY THE SIGNAL CONTROLLER IN THE SIGNAL CABINET.

DESIGN-ONLY NOTES:

- A. OBTAIN APPROVAL FOR PLACEMENT OF SIGNAL FACES LESS THAN 50 FT FROM STOP LINE FROM THE ENGINEER.

MAXIMUM MOUNTING HEIGHT OF SIGNAL FACES
BETWEEN 40 FT AND 49 FT FROM STOP LINE
(SEE NOTE A)

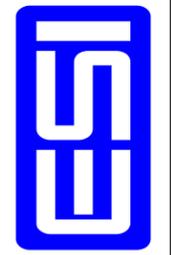
HORIZONTAL DISTANCE FROM STOP LINE (FT)	HEIGHT TO TOP OF SIGNAL HOUSING ABOVE PAVEMENT (FT)
40	21
42	21.7
44	22.4
46	23.1
48	23.8
49	24.2

REVISIONS



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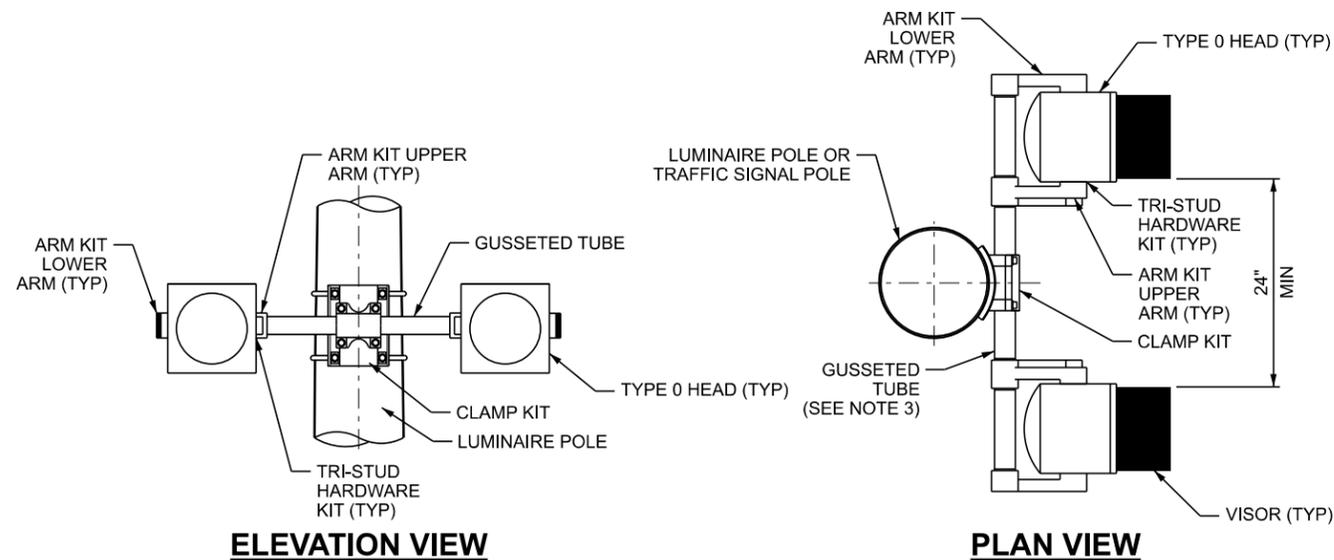


NORTH OGDEN CITY
450 EAST WIDENING
PROJECT PHASE 2
SIGNAL DETAIL

SHEET NO. 32

SHEET TYP. SGGT-04

PROJ. NO. 24-131

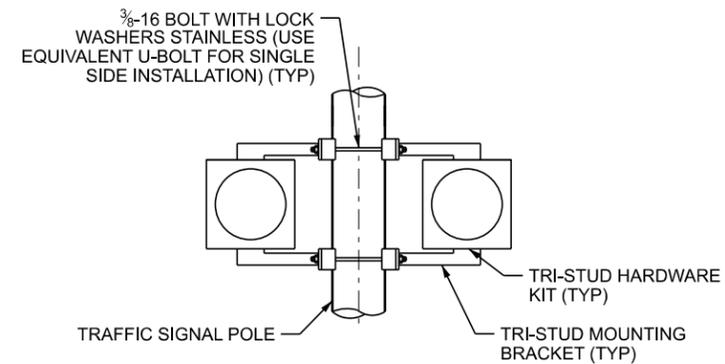


ELEVATION VIEW

PLAN VIEW

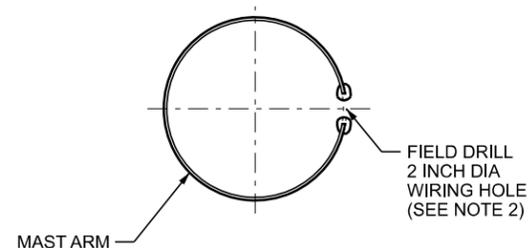
TYPE 0 POST MOUNT - CLAMP BRACKET

LUMINAIRE POLE OR
4 1/2 INCH OD SIGNAL POLE (OPTIONAL)

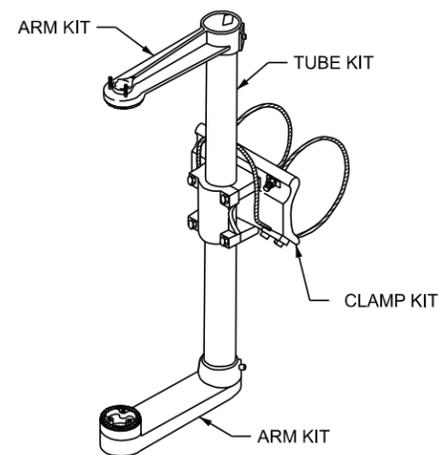


TYPE 0 POST MOUNT - BOLT BRACKET

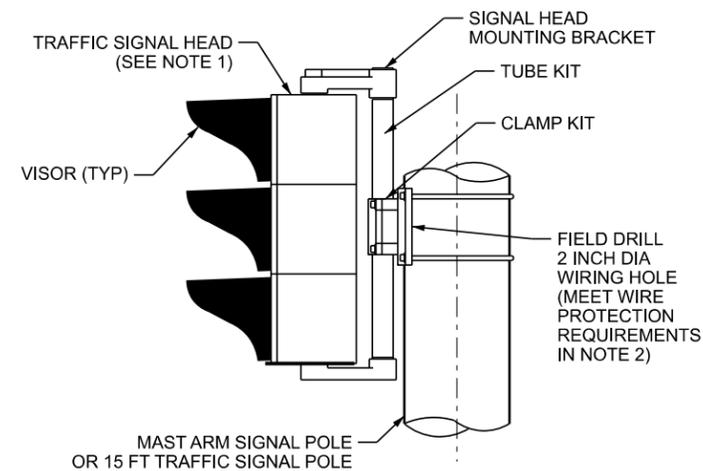
4 1/2 INCH OD SIGNAL POLE (PREFERRED)



WIRE ENTRY HOLE DETAIL



SIGNAL HEAD MOUNTING BRACKET DETAIL

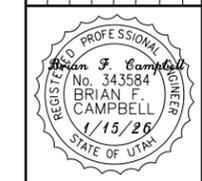


SIGNAL POLE MOUNT

NOTES:

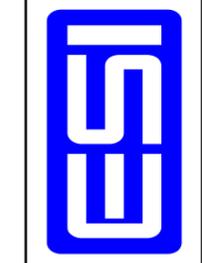
1. PROVIDE AN 8 FT MINIMUM AND 19 FT MAXIMUM CLEARANCE FROM BOTTOM OF NEARSIDE SIGNAL HEADS, INCLUDING BACK PLATES AND BRACKETS, TO TOP OF SIDEWALK OR PAVEMENT CROWN ELEVATION.
2. FIELD DRILL 2 INCH DIAMETER WIRING HOLE ALONG THE HORIZONTAL CENTROID OF THE MAST ARM AT EACH SIGNAL HEAD LOCATION. DEBURR THE HOLE PRIOR TO INSTALLING SIGNAL HEAD BRACKET.
3. PROVIDE A SINGLE GUSSETED TUBE THAT EXTENDS THROUGH BOTH UPPER ARM KITS AND THREADS INTO LOWER ARM KITS.

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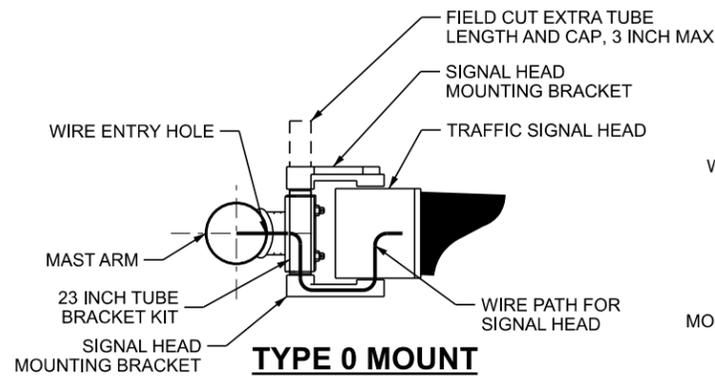


NORTH OGDEN CITY
450 EAST WIDENING
PROJECT PHASE 2
SIGNAL DETAIL

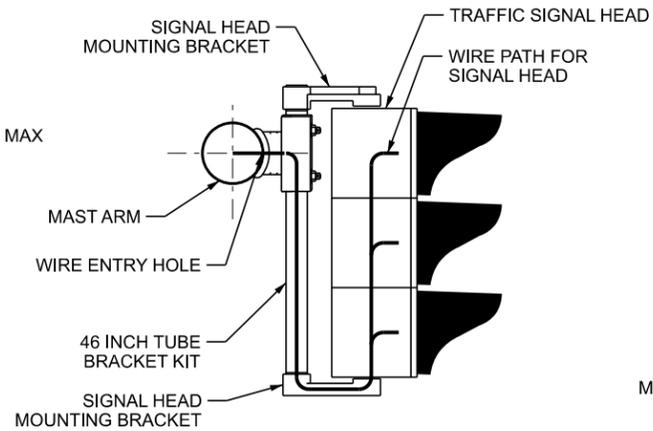
SHEET NO. 33

SHEET TYP. SGGT-05

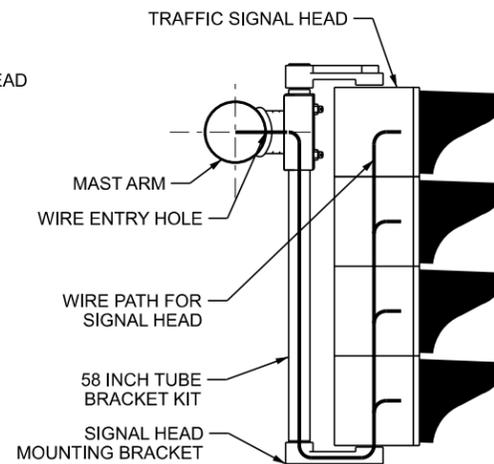
PROJ. NO. 24-131



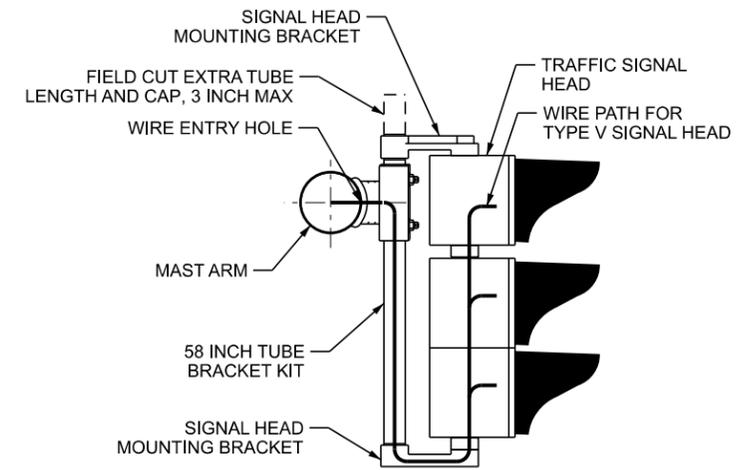
TYPE 0 MOUNT



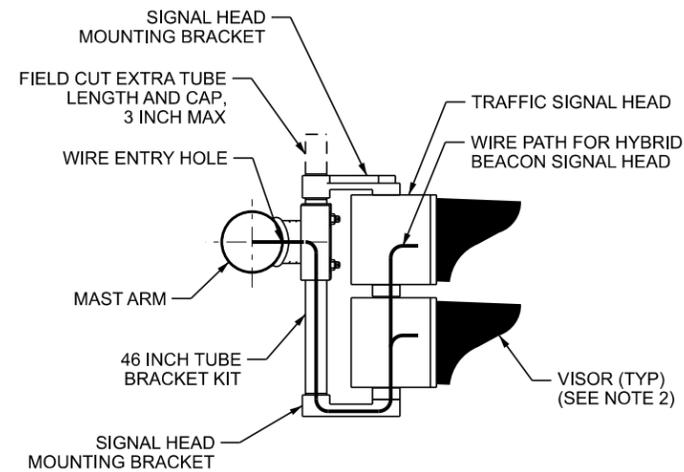
TYPE I, II, AND III MOUNT



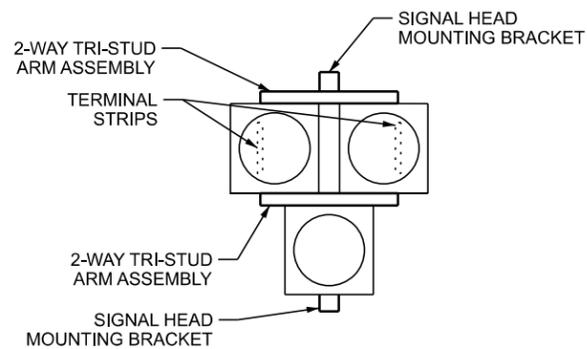
TYPE IV AND VI MOUNT



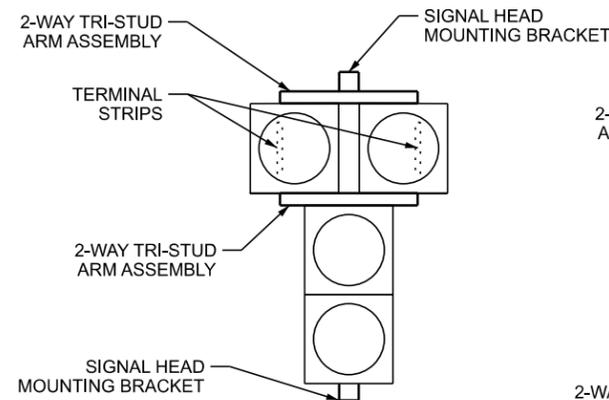
TYPE V AND VII MOUNT



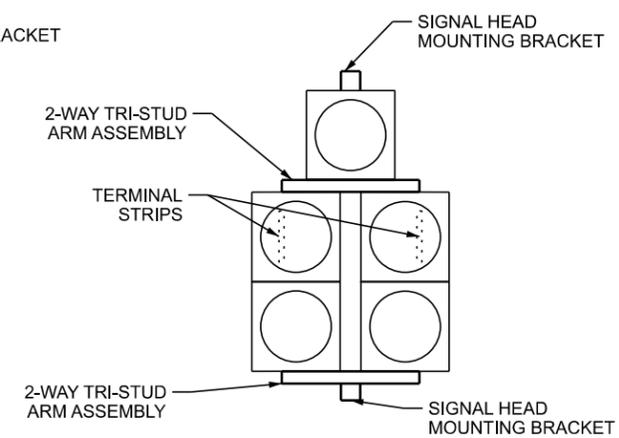
HYBRID BEACON MOUNT



HYBRID BEACON CONFIGURATION



TYPE VII CONFIGURATION



TYPE V CONFIGURATION

NOTES:

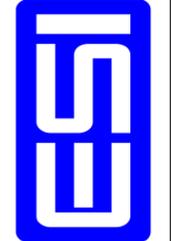
3. PROVIDE AND INSTALL SIGNAL HEAD MOUNTING BRACKET. PROVIDE 24 INCH SLACK IN WIRE IN SIGNAL HEAD SO SIGNAL HEAD CAN ADJUST UP AND DOWN THE FULL EXTENT OF THE TUBE.
4. DO NOT STRIP BACK SIGNAL CABLE OUTER SHEATHING EXCEPT WITHIN THE SIGNAL HEAD. MAINTAIN THE OUTER SHEATHING THROUGH THE TUBE BRACKET KIT AND MOUNTING BRACKET.
5. SEE STD DWG SL 3B FOR SIGNAL HEAD MOUNTING BRACKET DETAIL.

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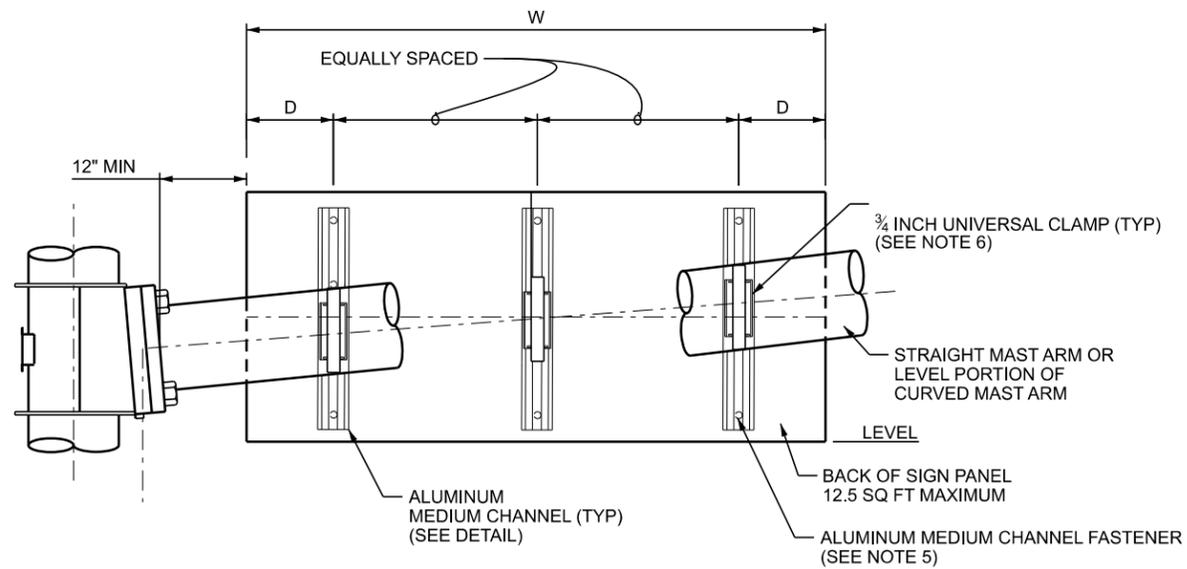
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NORTH OGDEN CITY
 450 EAST WIDENING
 PROJECT PHASE 2
 SIGNAL DETAIL

SHEET NO.	34
SHEET TYP.	SGDT-06
PROJ. NO.	24-131

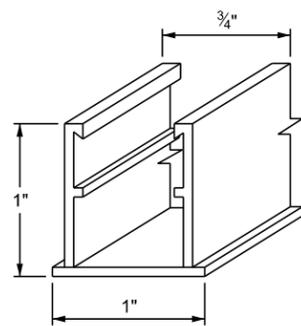


OPTION A MAST ARM SIGN MOUNT

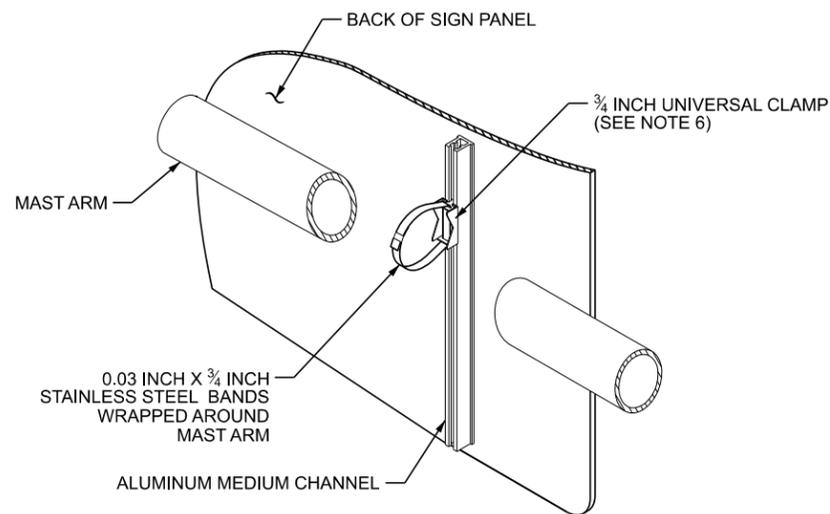
(SEE TABLE 1)
(SEE NOTE 2)

TABLE 1
DIMENSIONS OF OPTION A

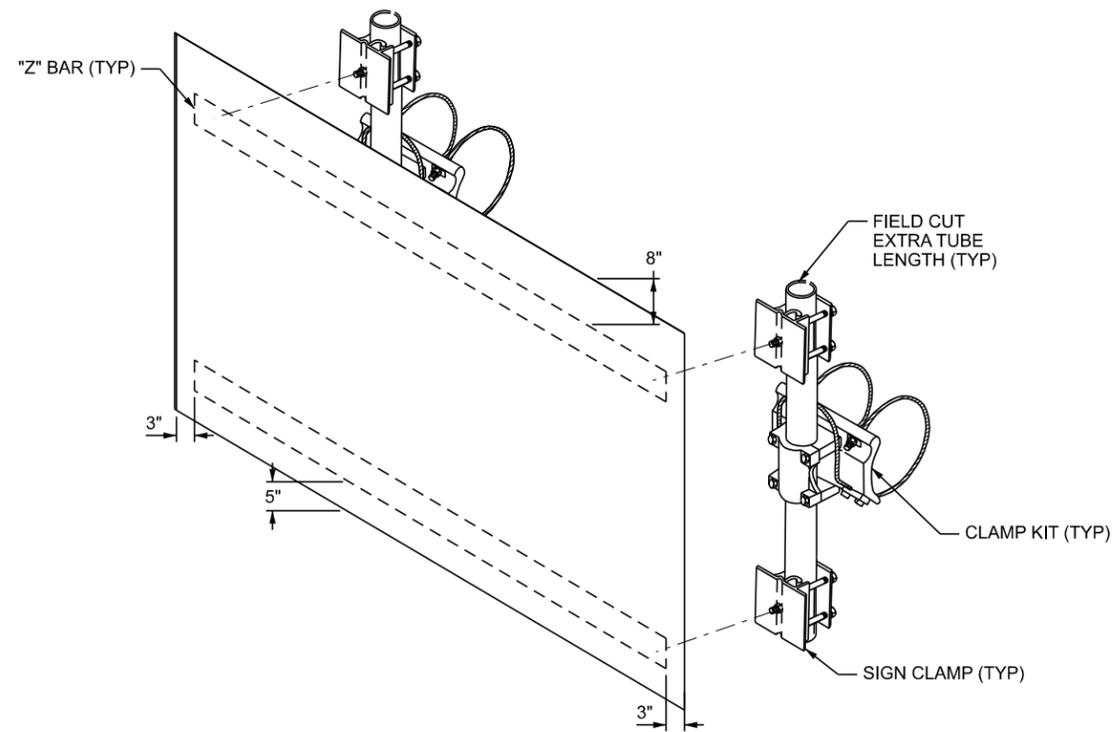
WIDTH OF SIGN (W, INCH)	D (INCH)	NUMBER OF MEDIUM CHANNELS
W ≤ 48	W/4	2
48 < W ≤ 96	12	3



ALUMINUM MEDIUM CHANNEL DETAIL

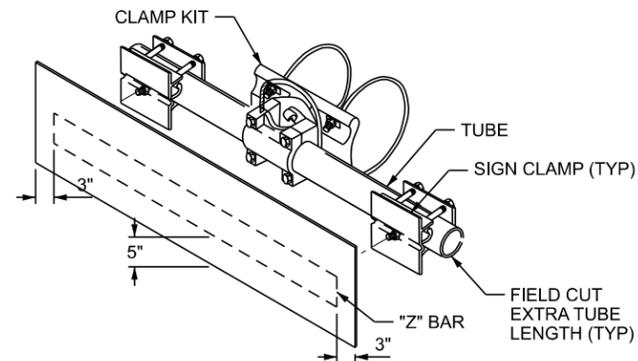


OPTION A INSTALLATION DETAIL



OPTION B MAST ARM SIGN MOUNT FOR LARGE SIGNS

HEIGHT: 24 TO 36 INCHES
(SEE NOTES 3 AND 4)



OPTION B MAST ARM SIGN MOUNT FOR SMALL SIGNS

HEIGHT: 18 INCHES OR LESS
(SEE NOTES 3 AND 4)

NOTES:

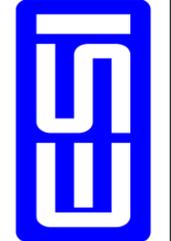
1. PROVIDE MINIMUM 18 FT- 6 INCH CLEARANCE FROM THE BOTTOM OF THE SIGN OR SIGN MOUNTING ASSEMBLY TO THE HIGHEST POINT ON THE ROADWAY SURFACE UNDER THE SIGN.
2. USE MAST ARM SIGN MOUNT OPTION A ONLY FOR SIGNS LESS THAN OR EQUAL TO 12.5 SQ FT ON STRAIGHT MAST ARMS OR ON THE LEVEL PORTION OF CURVED MAST ARMS.
3. USE 2 SIGN CLAMPS FOR SIGNS UP TO 3 FT LONG. USE 4 SIGN CLAMPS FOR SIGNS 3 FT TO 8 FT LONG. USE 6 SIGN CLAMPS FOR SIGNS LONGER THAN 8 FT.
4. MOUNT CENTER OF "Z" BAR 5 INCHES FROM THE BOTTOM EDGE OF SIGN. PROVIDE 3 INCHES FROM ENDS OF "Z" BAR TO BOTH EDGES OF SIGN. CONNECT THE OUTERMOST SIGN CLAMP 3 INCHES FROM THE ENDS OF THE "Z" BAR. USE STAINLESS STEEL TRUSS BOLTS FOR SIGN FASTENING. SEE STD DWG SN 9B.
5. ATTACH THE ALUMINUM MEDIUM CHANNEL TO SIGN PANEL WITH STAINLESS STEEL BOLTS, TAPPING SCREWS OR POP RIVETS AS SPECIFIED. USE ADHESIVE ONLY WHEN SHOP APPLIED. NO FIELD ADHESIVE IS ALLOWED.
6. ADJUST UNIVERSAL CLAMP LOCATION TO LEVEL SIGN.

REVISIONS	NO.	DATE	APPROVED BY	REMARKS



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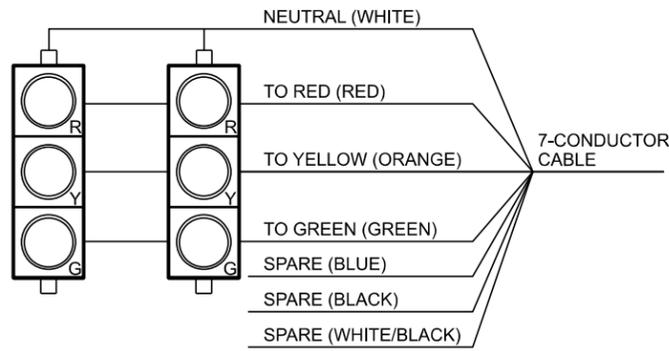


NORTH OGDEN CITY
450 EAST WIDENING
PROJECT PHASE 2
SIGNAL DETAIL

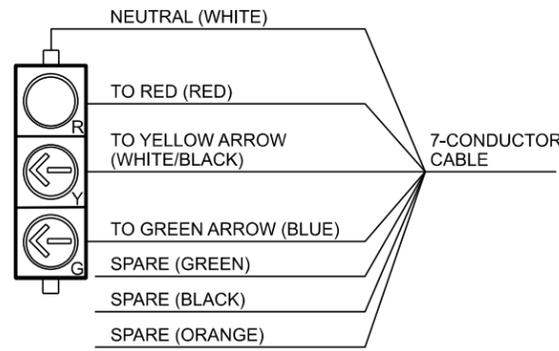
SHEET NO. 35

SHEET TYP. SGGT-07

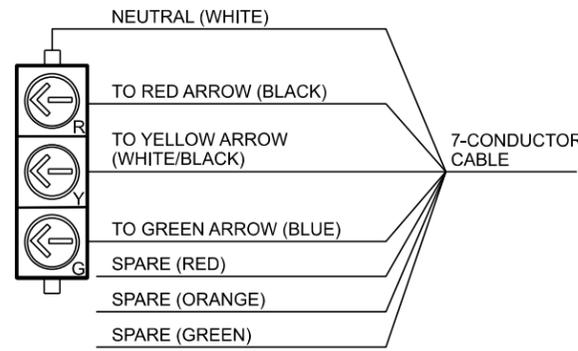
PROJ. NO. 24-131



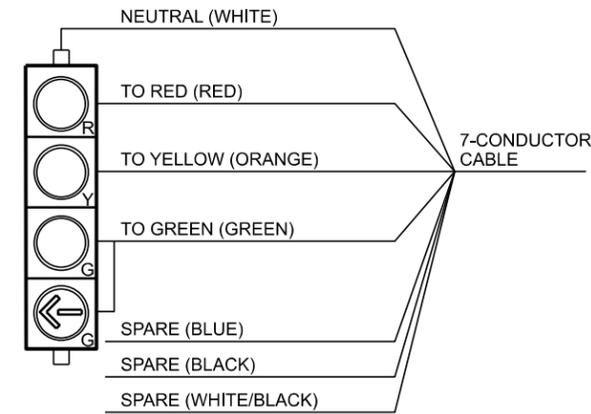
**TYPE I SIGNAL HEAD
WIRE ASSIGNMENT**



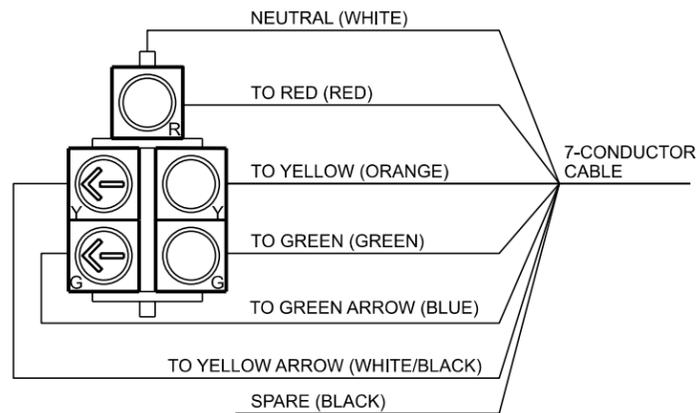
**TYPE II SIGNAL HEAD
WIRE ASSIGNMENT**



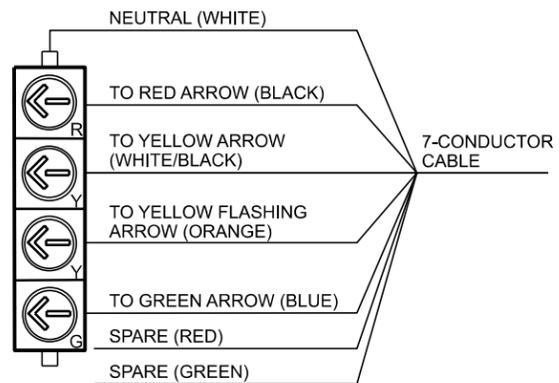
**TYPE III SIGNAL HEAD
WIRE ASSIGNMENT**



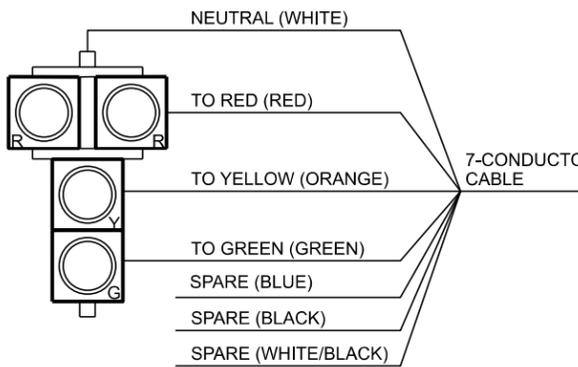
**TYPE IV SIGNAL HEAD
WIRE ASSIGNMENT**



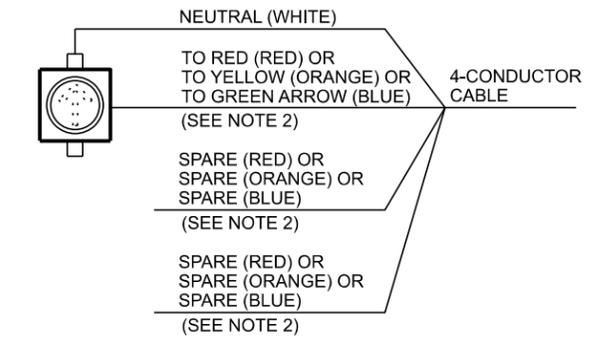
**TYPE V SIGNAL HEAD
WIRE ASSIGNMENT**



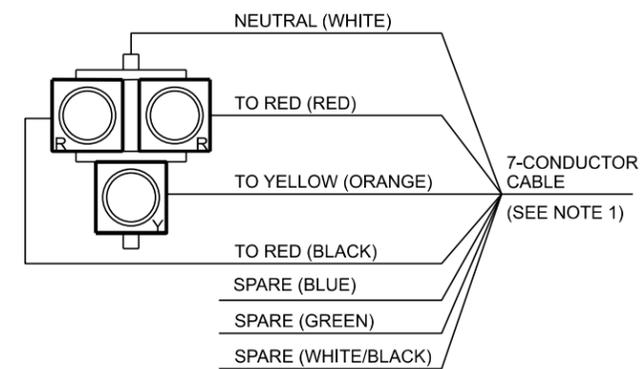
**TYPE VI SIGNAL HEAD
WIRE ASSIGNMENT**



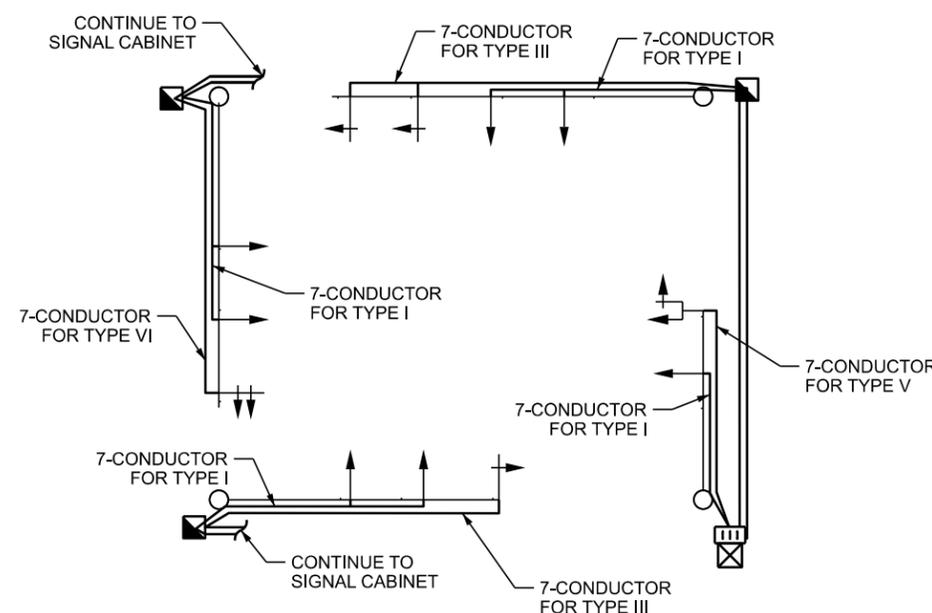
**TYPE VII SIGNAL HEAD
WIRE ASSIGNMENT**



**TYPE 0 SIGNAL HEAD
WIRE ASSIGNMENT**



**HYBRID BEACON
WIRE ASSIGNMENT**



**TYPICAL WIRING DIAGRAM
(DEPICTING VARIOUS LEFT TURN TREATMENTS)**

LEGEND

- MAST ARM SIGNAL POLE
- TYPE I SIGNAL HEAD
- ↑ TYPE III SIGNAL HEAD
- ↖ TYPE V SIGNAL HEAD
- ⚡ TYPE VI SIGNAL HEAD
- ▣ SIGNAL JUNCTION BOX
- ▤ TYPE III JUNCTION BOX
- ⊠ SIGNAL CABINET

NOTES:

1. A 4-CONDUCTOR MAY BE USED FOR HYBRID BEACONS AS APPROVED BY THE ENGINEER.

DESIGN-ONLY NOTES:

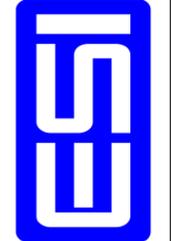
A. A 4-CONDUCTOR MAY BE USED FOR HYBRID BEACONS AS APPROVED BY THE ENGINEER.

NO.	DATE	APPROVED BY	REMARKS



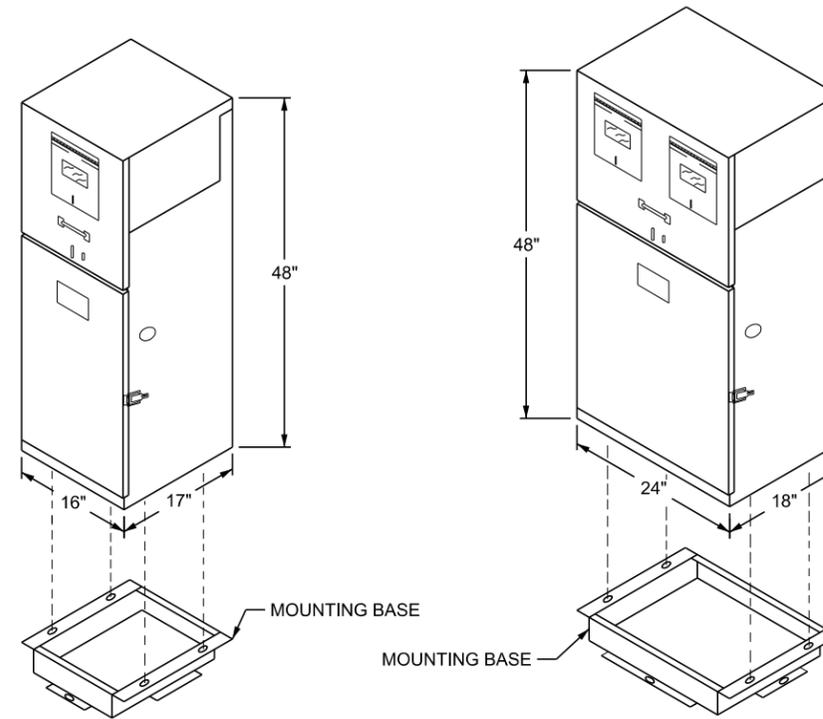
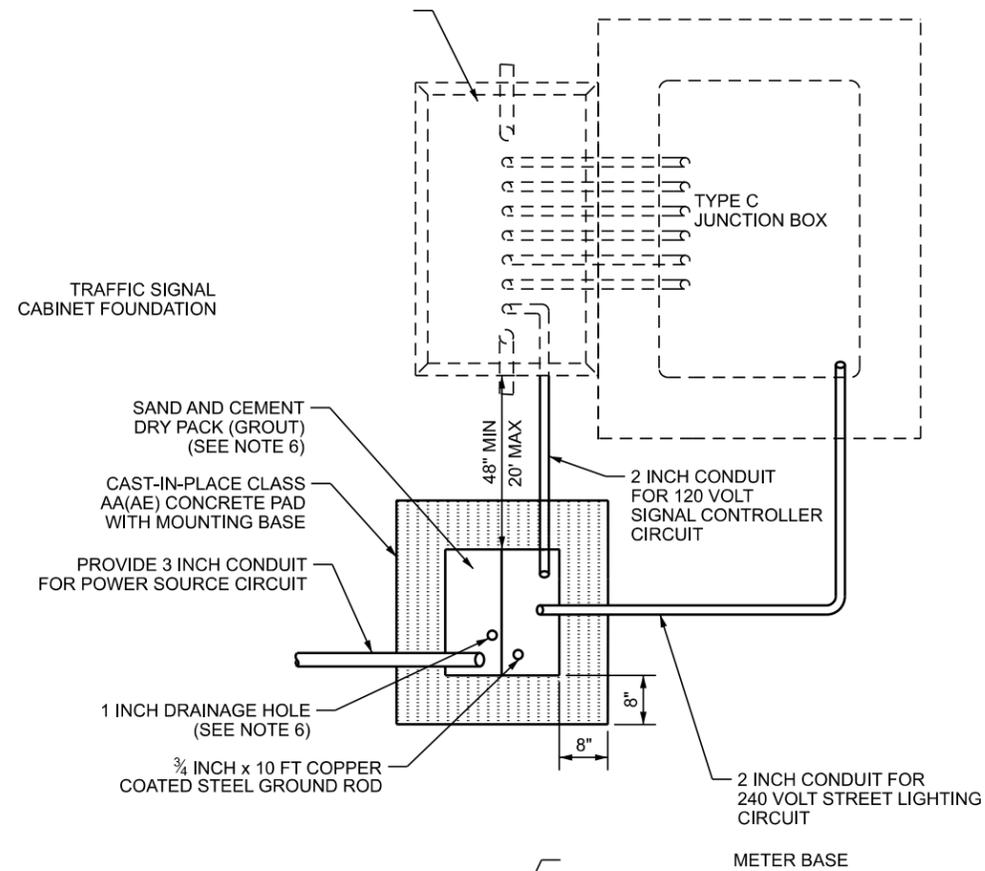
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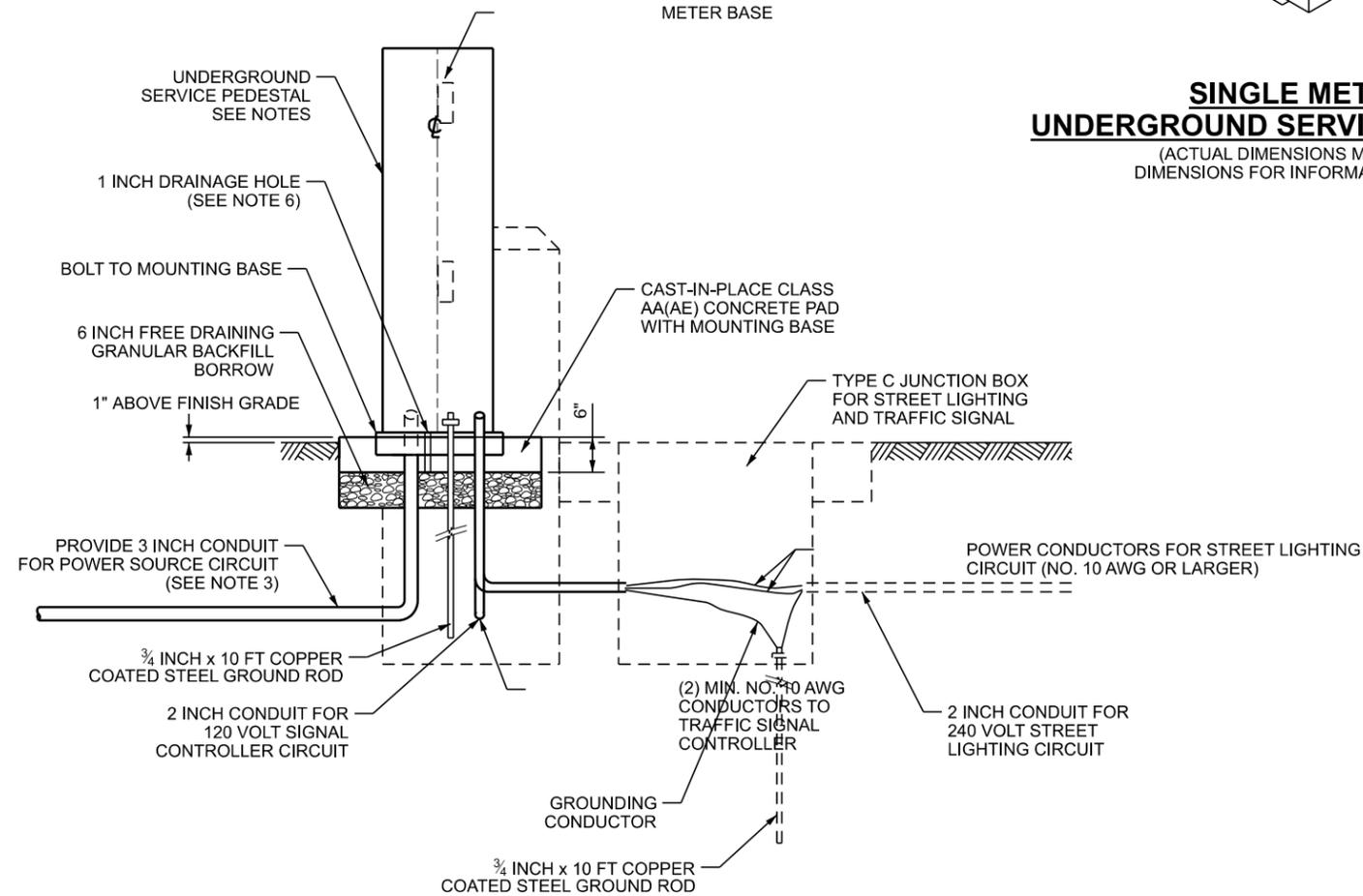
NORTH OGDEN CITY
450 EAST WIDENING
PROJECT PHASE 2
SIGNAL DETAIL

SHEET NO.	36
SHEET TYP.	SGDT-08
PROJ. NO.	24-131



**SINGLE METER
UNDERGROUND SERVICE PEDESTAL**
(ACTUAL DIMENSIONS MAY VARY,
DIMENSIONS FOR INFORMATION ONLY)

**DUAL METER
UNDERGROUND SERVICE PEDESTAL**
(ACTUAL DIMENSIONS MAY VARY,
DIMENSIONS FOR INFORMATION ONLY)



NOTES:

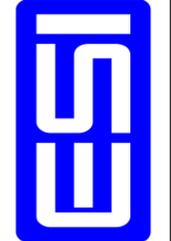
1. LOCATE SERVICE PEDESTAL ON EITHER SIDE OF TRAFFIC SIGNAL CABINET FOUNDATION AS SHOWN. LOCATION MAY BE MODIFIED TO BEST SUIT FIELD CONDITIONS WITH ENGINEER'S APPROVAL. MAINTAIN 48 INCH MINIMUM CLEARANCE AROUND EACH UNIT WITH DOORS OPENED TO ANY POSITION. PLACE UNDERGROUND SERVICE PEDESTAL WITHIN 20 FT OF CABINET.
2. LOCATE SERVICE PEDESTAL AND CONTROLLER SO WATER DRAINS AWAY FROM FOUNDATIONS AND JUNCTION BOXES. SITE PREPARATION, INCLUDING GRADING, MAY BE REQUIRED BEFORE PLACING EQUIPMENT.
3. PROVIDE SINGLE-PHASE, 3-WIRE, 100A SERVICE. COORDINATE WITH LOCAL UTILITIES REGARDING SERVICE CONDUCTORS.
4. SEE SGGT-10 FOR JUNCTION BOX DETAILS.
5. INSTALL SAND AND CEMENT DRY PACK (GROUT) WITHIN MOUNTING BASE AFTER INSTALLATION OF CONDUITS AND GROUND ROD. PROVIDE 1-INCH DRAINAGE HOLE AT LOW POINT TO ALLOW DRAINAGE FROM TOP OF GROUT.
6. CAST PEDESTAL MOUNTING BASE INTO CONCRETE PEDESTAL PAD.
7. PROVIDE 6 FT MINIMUM LATERAL OFFSET BETWEEN GROUND RODS WITHIN SERVICE PEDESTAL AND TYPE C JUNCTION BOX.

REVISIONS	NO.	DATE	APPROVED BY	REMARKS



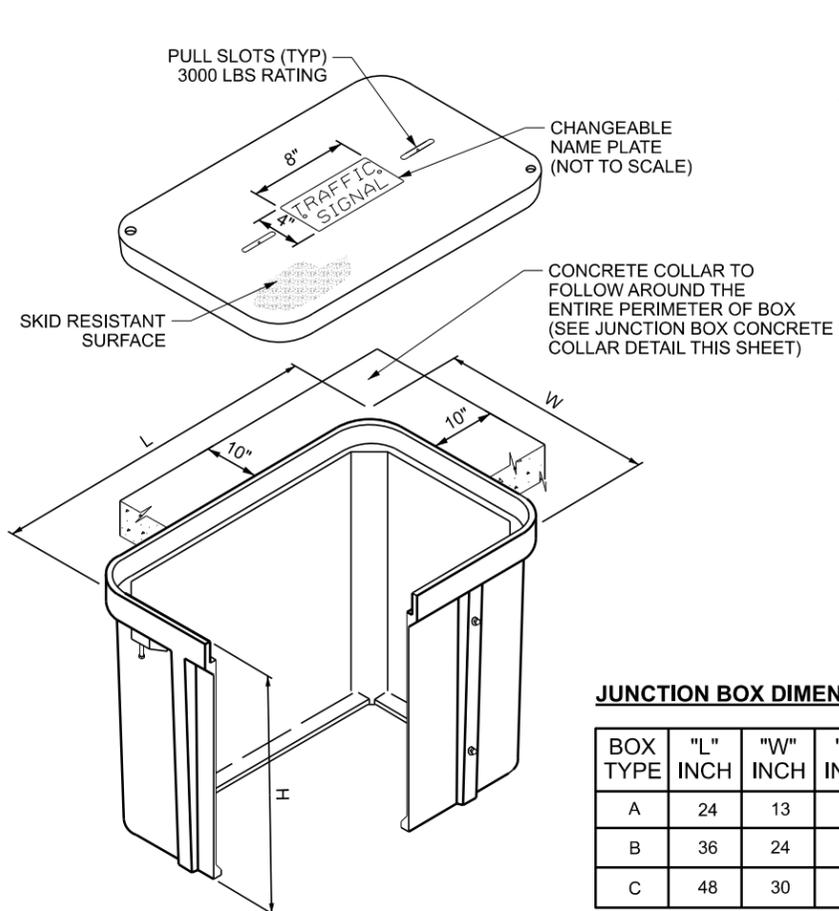
10/7/2025 DATE	MDF DRAWN BY	BFC CHECKED BY
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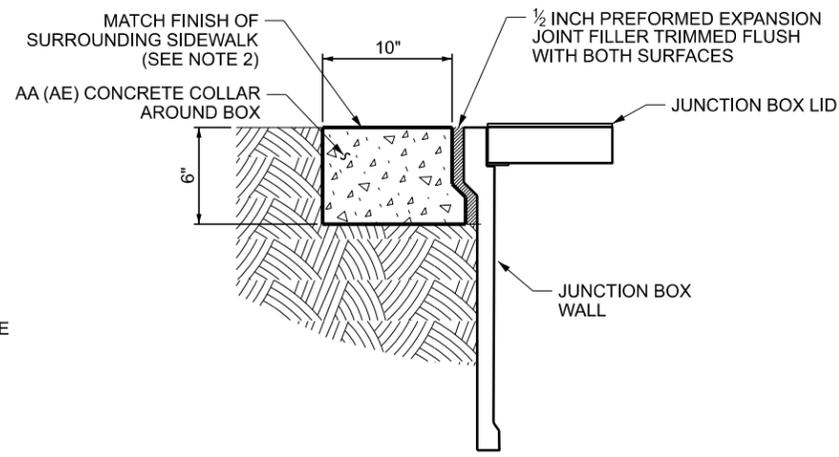
NORTH OGDEN CITY
450 EAST WIDENING
PROJECT PHASE 2
SIGNAL DETAIL

SHEET NO. 37
SHEET TYP. SGGT-09
PROJ. NO. 24-131



JUNCTION BOX DIMENSIONS

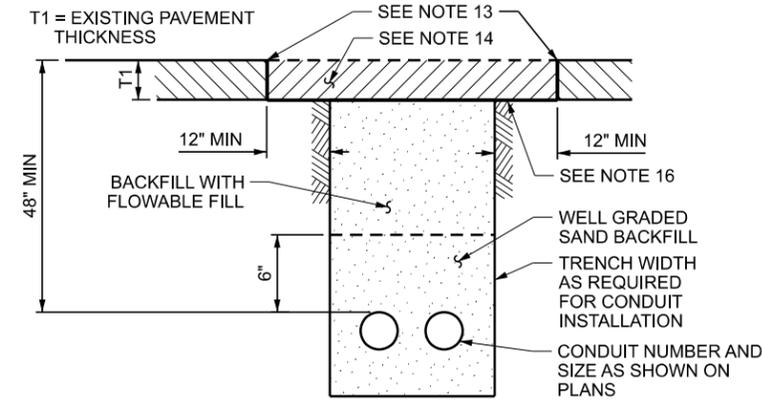
BOX TYPE	"L" INCH	"W" INCH	"H" INCH	LOADING
A	24	13	24	TIER 22
B	36	24	24	TIER 22
C	48	30	24	TIER 22



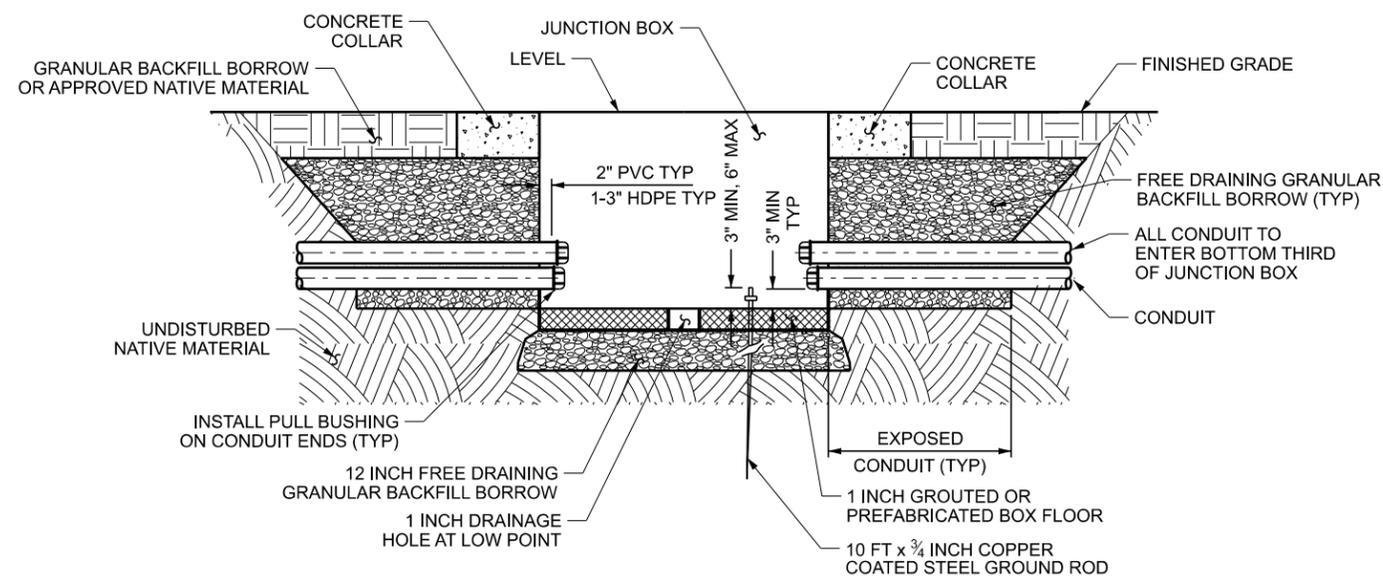
JUNCTION BOX CONCRETE COLLAR DETAIL

MINIMUM CONDUIT DEPTH

DEPTH (INCH)	AREA
24	OUTSIDE OF PAVEMENT (TRENCHED)
48	UNDER PAVEMENT SURFACE (TRENCHED)
36	OUTSIDE 20 FT OF PAVEMENT EDGE (BORED)
48	HIGHWAY RIGHT-OF-WAY UNDER ASPHALT PAVEMENT SURFACE (BORED)
60	WITHIN 20 FT OF PAVEMENT EDGE (BORED)



CONDUIT TRENCHED IN ASPHALT PAVEMENT DETAIL

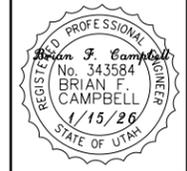


JUNCTION BOX CONDUIT PENETRATION DETAIL

- NOTES:**
- DO NOT PLACE JUNCTION BOXES IN THE TRAVELED WAY OR ON ROADWAY SHOULDERS.
 - CONCRETE SIDEWALK/FLATWORK TAKES THE PLACE OF CONCRETE COLLARS ON ANY OR ALL SIDES. DO NOT PLACE SEPARATE CONCRETE COLLAR WITHIN CONCRETE SIDEWALK/FLATWORK.
 - SEAL ALL CONDUITS INSIDE JUNCTION BOX WITH 2 INCHES OF DUCT SEAL AFTER ALL WIRING IS COMPLETE.
 - INSTALL PULL BUSHING ON ALL CONDUIT ENDS BEFORE INSTALLING WIRING.
 - CONFORM TO ANSI/SCTE-77 "SPECIFICATION FOR UNDERGROUND ENCLOSURE INTEGRITY" TIER 22 LOADING FOR ALL JUNCTION BOXES. TIER 22 ID PLATE TO BE VISIBLE ON BOX.
 - EXTEND GROUND ROD A MINIMUM OF 3 INCHES AND A MAXIMUM OF 6 INCHES ABOVE BOTTOM OF JUNCTION BOX.
 - USE GROUND ROD CLAMP AND A SPLIT BOLT FOR BONDING TO GROUND ROD. ATTACH NOT MORE THAN 4 WIRES PER CLAMP.
 - DO NOT CUT GROUND RODS TO A LENGTH LESS THAN 10 FT.
 - PROVIDE CLEAR SPACE OF AT LEAST 36 INCHES FOR PERSONNEL TO PULL LID OFF BOX WITHOUT CONFLICT.
 - ATTACH NAME PLATE USING ADHESIVE ACCORDING TO THE MANUFACTURERS DIRECTION AND MEETING OR EXCEEDING THE FOLLOWING SPECIFICATIONS:
 - TENSILE STRENGTH - 1200 PSI
 - SERVICE TEMPERATURE, CURED - SUBZERO TO +140° F
 - CURE TIME - 24 HOURS
 INSERT TWO NON-CORRODING TAMPER RESISTANT SCREWS AFTER APPLYING ADHESIVE.
 - CHANGEABLE NAME PLATES ARE NOT REQUIRED ON POLYMER CONCRETE COVERS. CONTRACTOR MAY USE STAMPED COVERS.
 - PROVIDE TYPE C JUNCTION BOXES WITH A SPLIT LID.
 - SAW CUT PAVEMENT EDGES. APPLY A HOT-POUR RUBBERIZED ASPHALT JOINT SEALANT OR APPROVED EQUAL, APPLIED AFTER PATCH IS INSTALLED.
 - USE DEPARTMENT APPROVED MATERIAL FOR ALL BACKFILL AND PAVEMENT PATCHES.
 - INSTALL DETECTABLE PULL TAPE IN ALL EMPTY CONDUITS.
 - EVENLY APPLY TACK COAT ON FINAL BACKFILL BEFORE INSTALLING T-PATCH.
 - DO NOT TRENCH THROUGH ASPHALT WITHOUT WRITTEN APPROVAL OF THE ENGINEER.
 - USE COMPRESSION COUPLINGS WHEN CONNECTING HDPE TO PVC CONDUIT.
 - RESERVE TOPMOST CONDUITS FOR FUTURE USE.

REVISIONS

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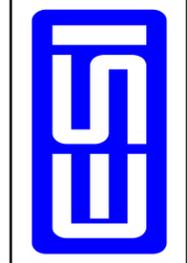
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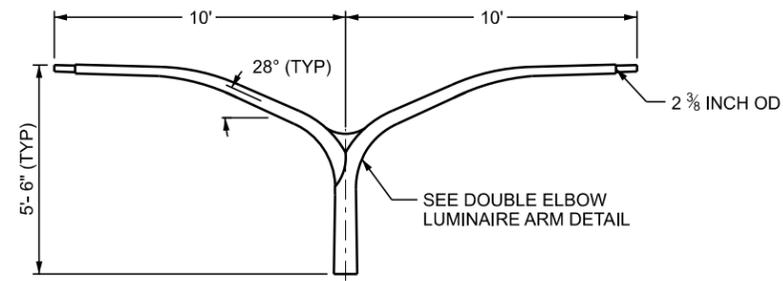
NORTH OGDEN CITY
 450 EAST WIDENING
 PROJECT PHASE 2

SIGNAL DETAIL

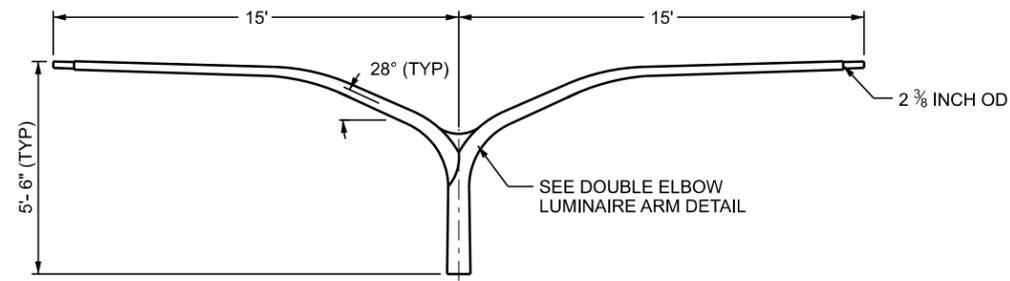
SHEET NO. 38

SHEET TYP. SGGT-10

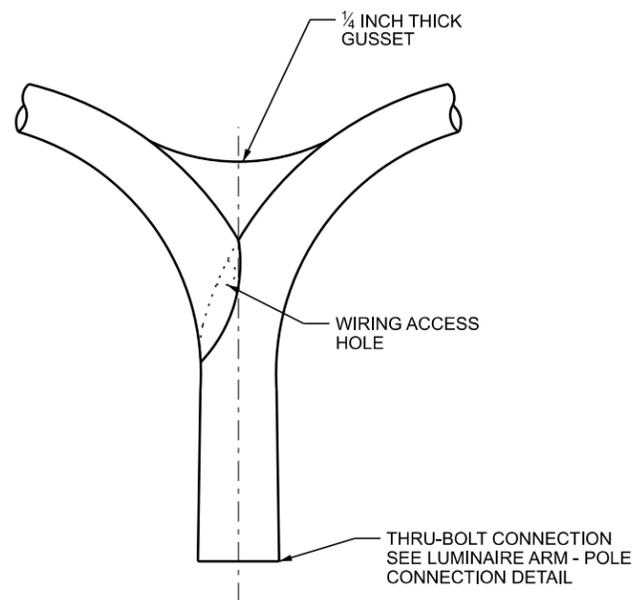
PROJ. NO. 24-131



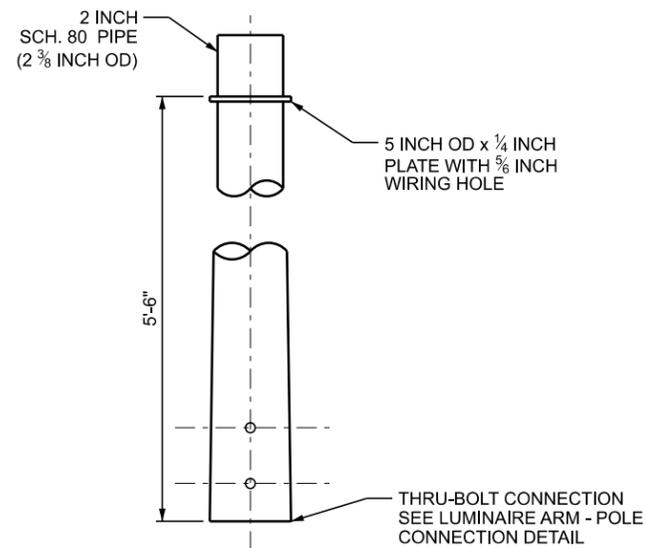
10' DUAL LUMINAIRE ARM



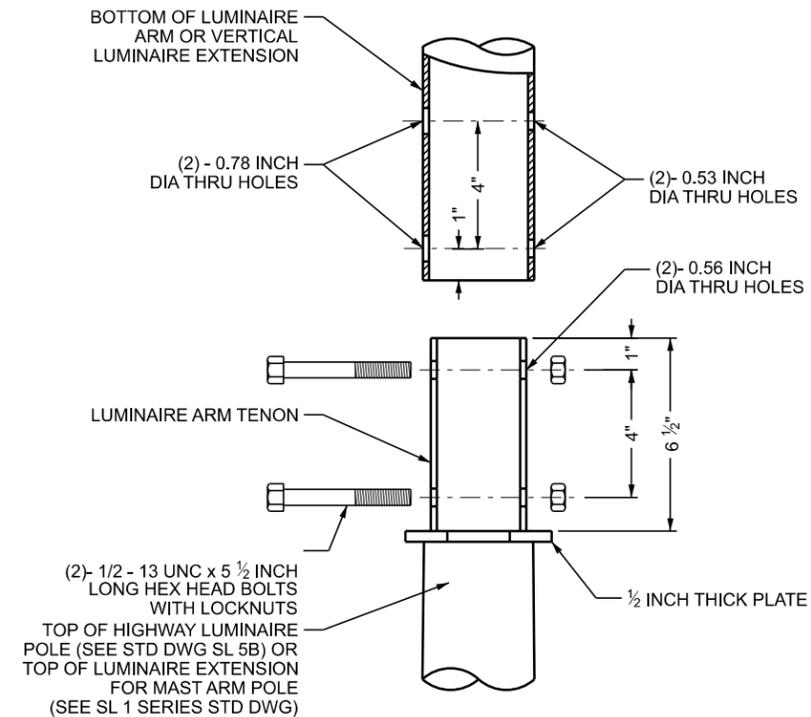
15' DUAL LUMINAIRE ARM



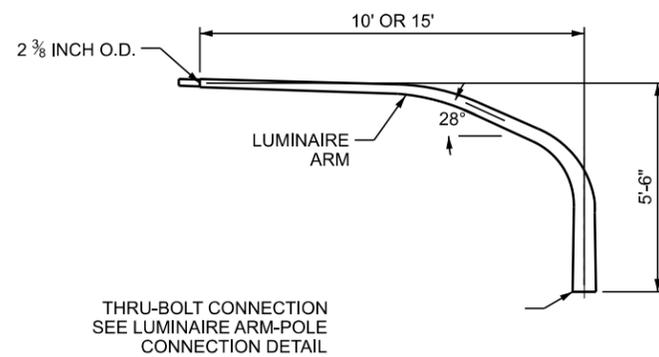
DOUBLE ELBOW LUMINAIRE ARM DETAIL



VERTICAL LUMINAIRE EXTENSION
(IN LIEU OF LUMINAIRE ARM)



LUMINAIRE ARM - POLE CONNECTION DETAIL



LUMINAIRE ARM DETAILS

NOTES:

- LUMINAIRE ARMS, VERTICAL EXTENSION, AND RELATED HARDWARE ARE STATE FURNISHED MATERIALS.
- ALL STEEL MATERIALS INCLUDING ANCHOR BOLTS ARE HOT-DIPPED GALVANIZED. AVOID DAMAGING THE GALVANIZED FINISH OF MATERIALS DURING TRANSPORT AND PLACEMENT. DELIVER THE STEEL TO THE POWDER COATING FACILITY THEN TO THE PROJECT SITE IF STEEL MATERIALS ARE TO BE POWDER COATED.

DESIGN-ONLY NOTES:

- USE EITHER A TYPE A (250 WATT) OR TYPE B (400 WATT) LED. COORDINATE LED TYPE WITH CITY ENGINEER.
- A VERTICAL LUMINAIRE EXTENSION MAY BE USED IN LIEU OF A LUMINAIRE ARM TO AVOID OVERHEAD CONFLICTS OR AS SPECIFIED BY THE ENGINEER. A STATE FURNISHED VERTICAL LUMINAIRE ADAPTER IS REQUIRED TO INSTALL THE LED WHEN USING A VERTICAL LUMINAIRE EXTENSION.

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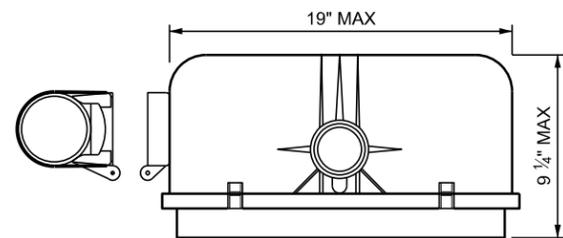


NORTH OGDEN CITY
450 EAST WIDENING
PROJECT PHASE 2
SIGNAL DETAIL

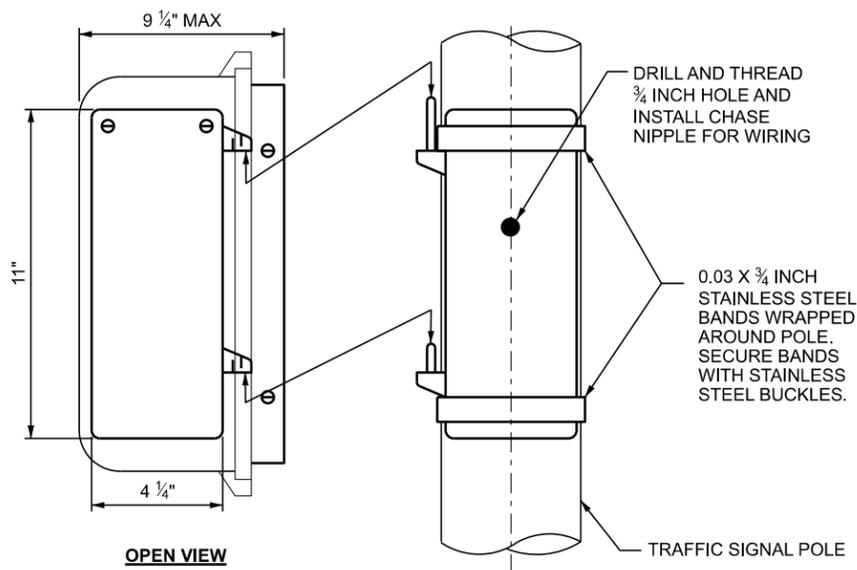
SHEET NO. 39

SHEET TYP. SGGT-11

PROJ. NO. 24-131

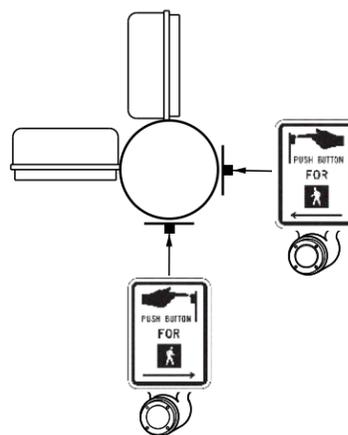


TOP VIEW



OPEN VIEW

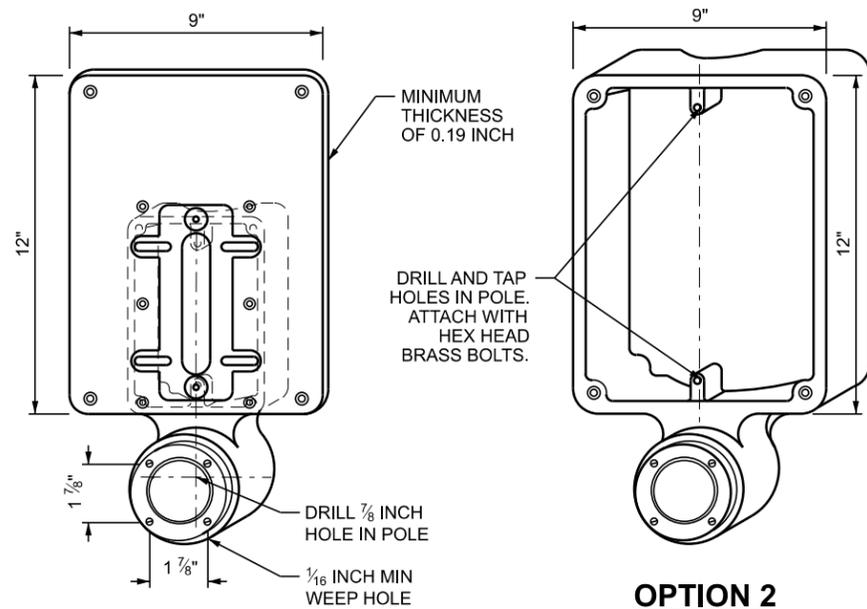
TYPICAL MOUNTING OF PEDESTRIAN SIGNAL AND PUSH BUTTON ON A SIGNAL POLE



MOUNTING OF PEDESTRIAN SIGNAL ON A SINGLE SIGNAL POLE

(NOTE 6)

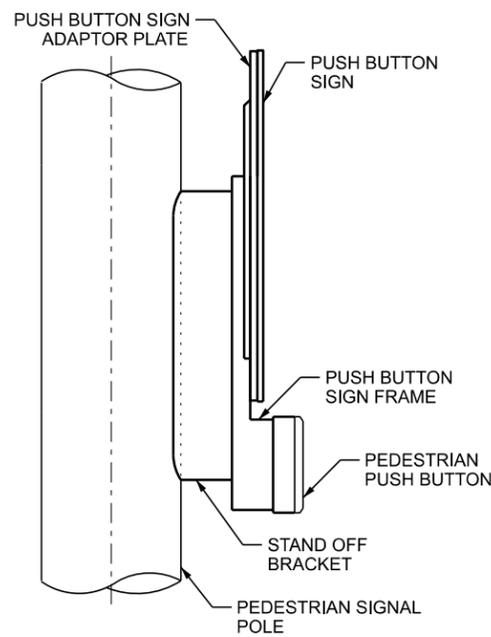
CLAMSHELL MOUNTING HARDWARE



OPTION 1

FRAME TO ACCOMMODATE 5 X 7 INCH SIGN WITH ADAPTOR PLATE FOR 9 X 12 INCH SIGN

OPTION 2
FRAME TO ACCOMMODATE 9 X 12 INCH SIGN



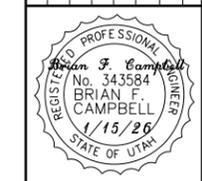
PUSH BUTTON FRAME STAND OFF BRACKET

(OPTION 1 SHOWN)
(NOTE 5)

NOTES

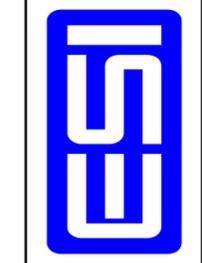
1. MOUNT PEDESTRIAN SIGNAL HEADS 9 FT 3 INCHES +/- 6 INCHES VERTICAL CLEARANCE FROM TURNING SPACE TO BOTTOM OF PEDESTRIAN SIGNAL HOUSING.
2. MOUNT PUSH BUTTONS 42 ± 2 INCHES ABOVE TURNING SPACE. MAX. HEIGHT OF 46 INCHES AND MIN. OF 36 INCHES MAY BE ALLOWED UPON APPROVAL OF THE ENGINEER.
3. MOUNT PUSH BUTTON 10 INCHES OR LESS FROM EDGE OF A TURNING SPACE COMPLIANT AREA PER STANDARD DRAWING PA SERIES. MAXIMUM DISTANCE OF 18 INCHES MAY BE ALLOWED UPON APPROVAL OF THE ENGINEER.
4. INSTALL PUSH BUTTONS AND PEDESTRIAN SIGNAL HEADS PARALLEL TO CROSSWALKS.
5. PROVIDE FRAME STANDOFF BRACKETS WHEN MOUNTING TWO SIGN FRAMES TO ONE PEDESTRIAN POLE.
6. PROVIDE DOUBLE SIDED (R10-3L, R10-3R) SIGN ON OPPOSITE FACES. POINT ARROW ON SIGN IN DIRECTION PEDESTRIAN WILL PROCEED ACROSS ROADWAY.

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NORTH OGDEN CITY
450 EAST WIDENING
PROJECT PHASE 2
SIGNAL DETAIL

SHEET NO. 40

SHEET TYP. SGGT-12

PROJ. NO. 24-131