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101, 50 FL

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SPOT ELEVATIONS

SEVER MANHOLE

SEVER CLEANOUT

SERVICE LATERAL

U=UTILITES>

SEWER LATERAL

FIRE HYDRANT

(W=WATER, G=GAS,

SERVICE METER (W=WATER)

STORM DRAIN MANHOLE

STORM DRAIN INLET

PUBLIC IMPROVEMENT PLANS FOR LEVEL (3) COMMUNICATIONS

3550 BROAD STREET SAN LUIS OBISPO CALIFORNIA 93401

GENERAL NOTES

- No construction shall be started without plans approved by the City Engineering Department. The City Engineer shall be notified at least twenty-four hours prior to starting of construction. Any construction done without approved plans or prior notification to the City Engineer will be rejected and will be at the Contractor's and/or Owner's risk.
- All work shall conform to the latest revision of the City of San Luis Obispo Standards and Specifications and shall be subject to the approval of the City Engineer.
- Contractor agrees that he shall assume sole and complete responsibility for the job site during the course of the project, including safety of all persons and property; that this requirement shall apply continuously and not be limited to normal working hours; and that the Contractor shall defend, indemnify, and hold the Engineer and Owner harmless from any and all liability, real or alleged, in connection with the performance of work on this project, excepting for liability arising from the sole negligence of the Owner or Engineer, or third party in violation of the law or in trespass. The Contractor shall practice safety at all times and shall furnish, erect, and maintain, such fences; barricades, lights, and signs necessary to give adequate protection to the public at all times.
- A City Encroachment Permit is required for all work done in the City right-of-way.

Information pertaining to existing underground facilities as shown herein is for information purposes only. Utilities shown in the plan view may not be shown in profile. It shall be the responsibility of the Contractor to contact "Underground Service Alert" at 1-800-642-2444, for location of power, telephone, oil, and natural gas underground facilities and he shall also contact the appropriate agency for the location of Cable TV, water, sewer, drainage, or other underground facilities.

All utility companies must be notified prior to the start of

- Compaction tests shall be made on subgrade material and material placed as specified by the Soils Engineer. Said tests shall be made prior to the placing of the next
- Contractor shall be responsible for the prevention of wind erosion and dust within the area of operation. Control shall be in accordance with the requirements of the City of San Luis Obispo. Method of control shall be selected by the Contractor but shall satisfy requirements.
- Contractor shall avoid tracking mud or debris onto adjoining private, City or County streets. In the event that such spoilage should occur as part of the construction or incidental to such construction (i.e. employees leaving the site in private vehicles, etc.), the Contractor shall be responsible for clean up and restoration of said streets.

- The Contractor shall have copies of the plans and specifications for this project on the site at all times and he shall be familiar with oll applicable standards and specifications.
- 11. All stationing shown on these plans refers to centerline unless otherwise
- The City Inspector, acting on behalf of the City Engineering Department, may require revisions in the plans to solve unforeseen problems that may arise in the field. All revisions shall be subject to the approval of the Developer's Engineer.
- The Engineer of record shall perform a survey of completed work to determine conformance with the approved plans. Contractor shall correct any differences found by such survey and will provide all Contractor's records kept during the course of construction to the Engineer for preparation of record drawings. Engineer will prepare such record drawings upon completion of the work and prior to City's final inspection.
- 14. Benchmark: The elevations shown hereon are based on the City of San Luis Obispo benchmark designated 7-96 and having a published elevation of 194.85'
- 15. Basis of Bearings: The basis of these improvement plans is the City of San Luis Obispo Horizontal Control Network, using the control points #8089 and #8091 having a calculated bearing of S 40' 15' 45" E.
- 16. Contractor shall be responsible for obtaining and paying for all necessary permits, fees, bonds, or charges in connection with
- 17. The contractor is responsible for the protection or proper resetting of all existing monuments and other survey markers. Any survey monuments destroyed by the contractor shall be replaced in accordance with the State Land Surveyor's Act at the contractor's
- 18. Estimated Soil Quantities to Subgrade: These quantities are estimates only and are not adjusted for removal of dirt, for shrink or swell in fill process or for rock incurred in excavation.

a.Cut = approx. 3370 CYb.Fill = approx. 45 CY

c.Quantity estimates shown on this plan are to be used for bonding and permit purposes only: it is the responsibility of the Contractor to verify actual quantities for the purposes of construction. d.Quantity, does not include the import of non-expansive material below

ASPHALT REQUIREMENTS:

Engineers. All rights reserved. Copies of this drowing shall have this notice.

1. Minimum pavement section shall be 4" Type "B" AC paving on 8" Class II aggregate base on 12" Class III subbase.

concrete flatwork as recommended by Soils Engineer.

- 2. Asphalt concrete paying shall conform to the requirements for asphalt concrete as specified in Section 39 of the State Standard Specifications. Any work done that does not meet or exceed the minimum specifications will be rejected.
- 3. A base prime coat shall be applied to the base and a pavement fog seal coat shall be applied to finished asphalt concrete surfaces, if directed by the City Inspector.

RECORD DRAWING

WHERE NOTED. THIS DRAWING INDICATES SOME CONSTRUCTION WHICH

LICENSE EXPIRES 03/31/04

EROSION CONTROL NOTES

- The need for and location of erosion control barriers will vary according to the phasing of construction and the season. It is the Contractor's responsibility to place barriers wherever necessary to prevent erosion damage. In addition the Contractor shall place barriers as called for by the Engineer or City Inspector.
- 2. The Temporary Erosion Control shall consist of utilizing the following:
 - Hay bale erosion barriers in unpaved areas as shown.
 - Native top soil, import sand, and other embankment/backfill material shall be stockpiled only in locations acceptable to the Engineer. These materials may require erosion barriers.
 - The Contractor is to assign at least one worker to be in charge of everyday checking of erosion control devices and maintenance of same.
 - d. Hay bales will be placed as an Erosion Control Measure as shown on the plans if the construction does not begin prior to October 15, 1992.
- All areas disturbed by grading activities and which are 3:1 or steeper shall be hydroseeded with "SLO Co. Hydroseed Mix."
- Contractor shall be responsible for the prevention of wind erosion and dust within the area of operation. Control shall be in accordance with Section 18 of the Standard Specifications of the City of San Luis Obispo.
- Contractor shall avoid tracking mud or debris onto adjoining private, City or County streets. In the event that such spoilage should occur as part of the construction or incidental to such construction (i.e. employees leaving the site in private vehicles, etc.), the Contractor shall be responsible for clean up and restoration of said streets.

SYMBOLS

REFER TO SHEETS OF THE SAME LETTER CATEGORY AS THE SHEET WITH THE REFERENCE.

DETAIL LETTER

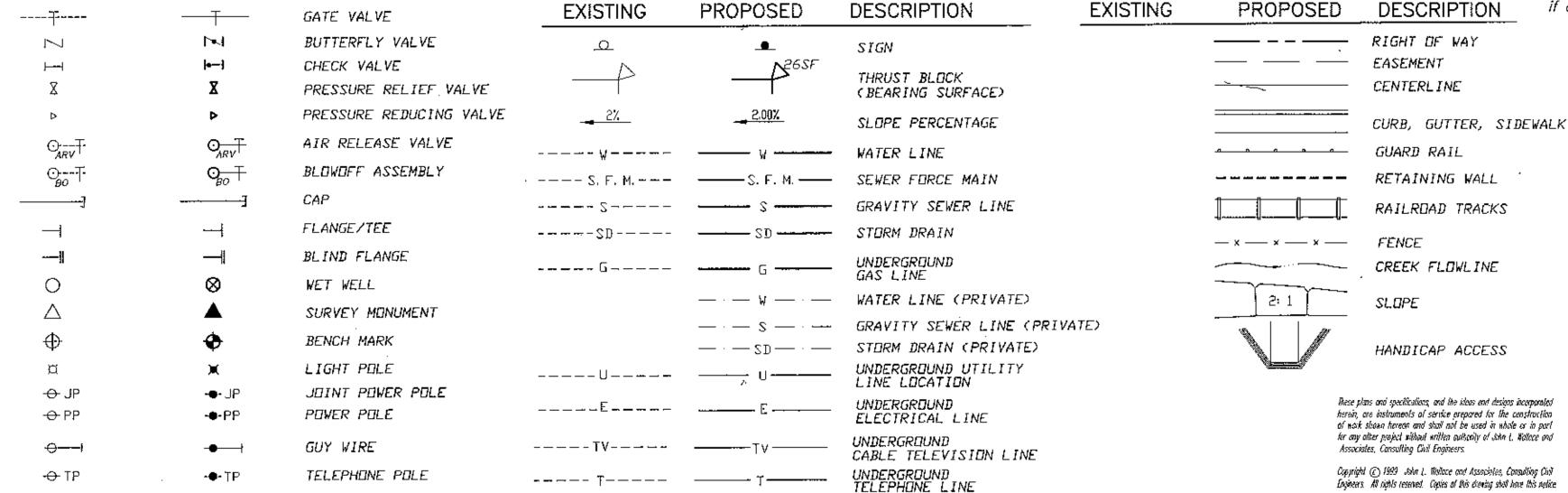
SHEET NUMBER WHERE DETAIL IS FOUND

THESE PLAN ARE PREPARED AS AN AMENDMENT TO THE PUBLIC IMPROVEMENT PLANS FOR WILLIAMS BROTHERS SHOPPING CENTER PREPARED BY MID-STATE ENGINEERS DATED MAY 15, 1991. CONSTRUCTION SHALL COMPLY WITH THE DESIGN AND DETAILS AS SHOWN ON THESE PLANS. THE MID-STATE PLANS ARE FOR REFERENCE ONLY.

SHEET INDEX

PUBLIC IMPROVEMENT PLANS FOR:

TITLE & CONSTRUCTION NOTES SHEET	.C-1
CAPITOLIO WAY STA. 5+12.25 TO 7+64.46	.C-2
SACRAMENTO DRIVE STA. 0+00 TO 3+50	.C-3
SACRAMENTO DRIVE STA. 3+50 TO 6+56.5.	.C-4
RETAINING WALL STRUCTURAL PLANS	S-1 TO S-4



John L. Wallace & Associates Civil Engineering - Surveying - Planning 4115 Sŏuth Brŏad Stréet, Suite B5' San Luis Obispo, California 93401 Tel (805)544-4011 Fax (805)544-4294 1-T-1411 12.8.99 O. CAL GAS Moule Jula DATE Ex., 3731/100 KhU Solmer 12-8-97

LEVEL (3) COMMUNICATIONS TITLE AND CONSTRUCTION NOTES SHEET REVISIONS DESIGN CITY DESCRIPTION RAWN BY: CHECKED BY: JOB NO. 372.01.06 11-30-99

THESE PLANS, IT DOES AUTHORIZE THE OWNER TO BUILD THE PROJECT HEREON. IT SHALL BE THE RESPONSIBILITY OF THE OWNER AND ENGINEER OF RECORD TO CORRECT ANY DEFICIENCIES THAT APPEAR DURING OR AFTER CONSTRUCTION, CIT SPECIFICATIONS AND ENGINEERING STANDARDS SHALL BE FOLLOWED UNLESS THEY RE SPECIFICALLY WAIVED OR MODIFIED BY NOTES ON PLANS. THE ENGINEER OF RECORD SHALL PROVIDE REPRODUCEABLE "AS-BUILT" PLANS AND 3 FULL SETS OF MICROFICHE PLANS TO THE CITY PRIOR TO PROJECT BEING ACCEPTED BY THE CITY CITY ENGINEER APPROVAL: N.A. (TYO) A. 14/21/97 TY UTILITIES ENGINEER

FILE / LOCATION

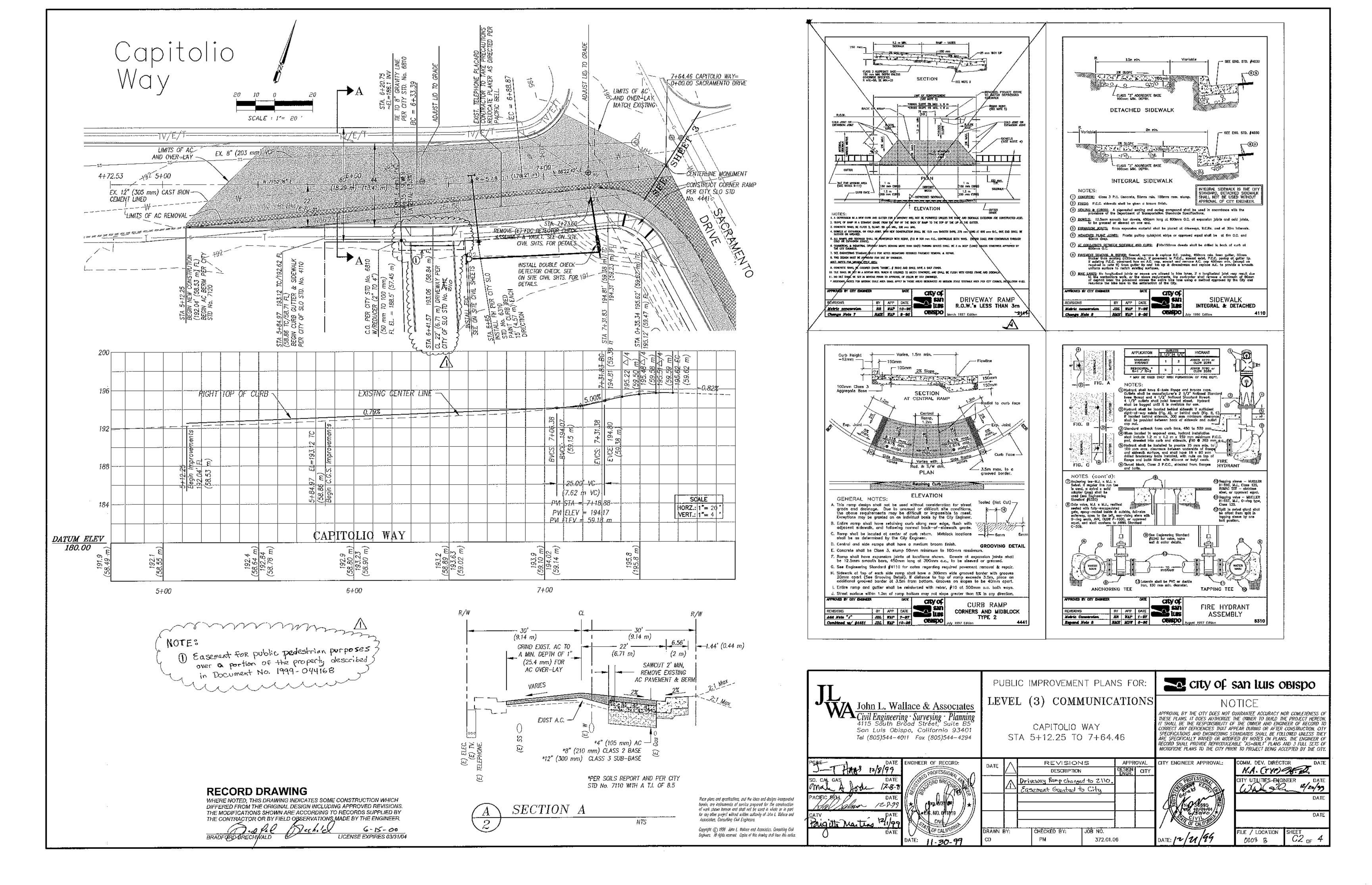
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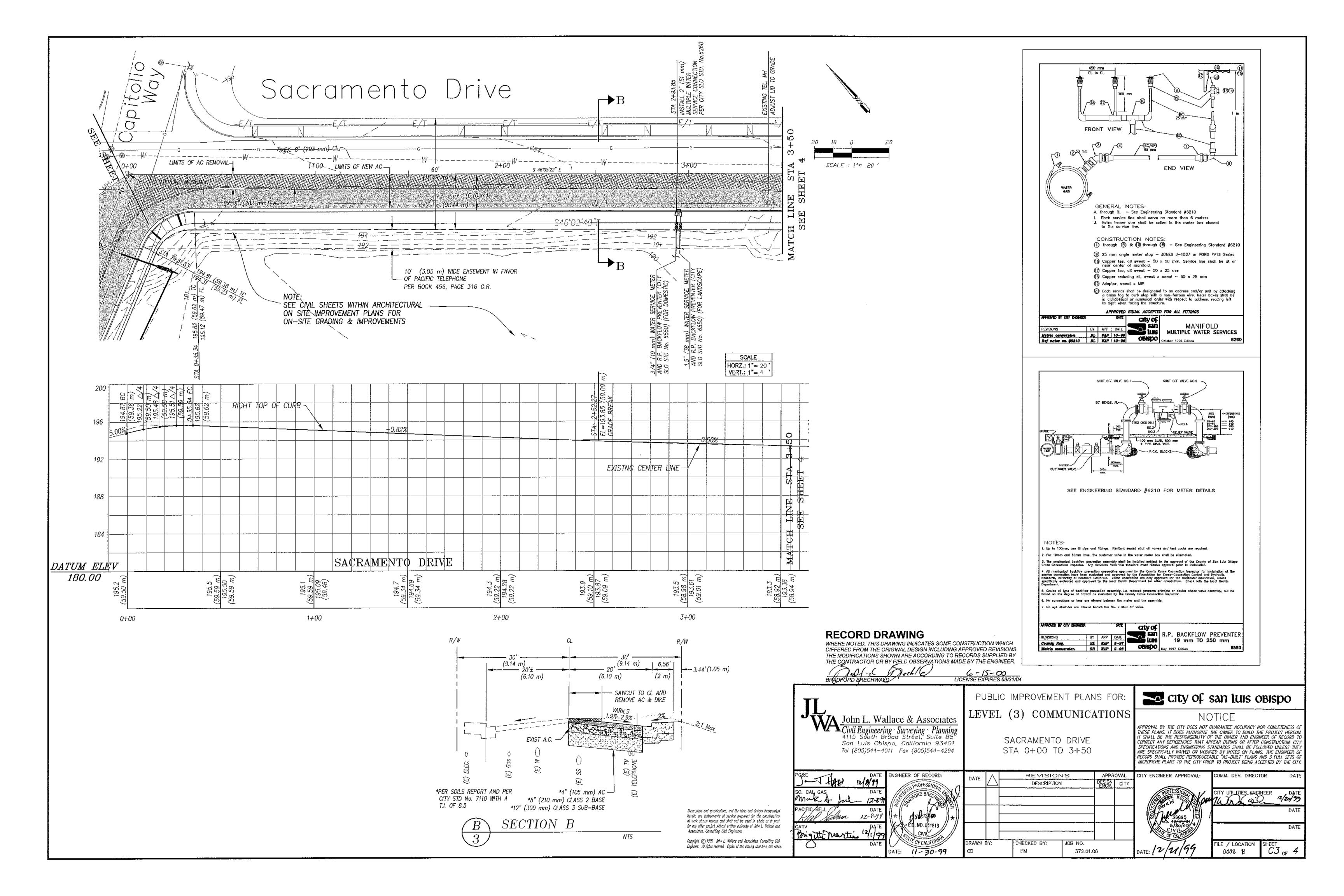
C1 of 4

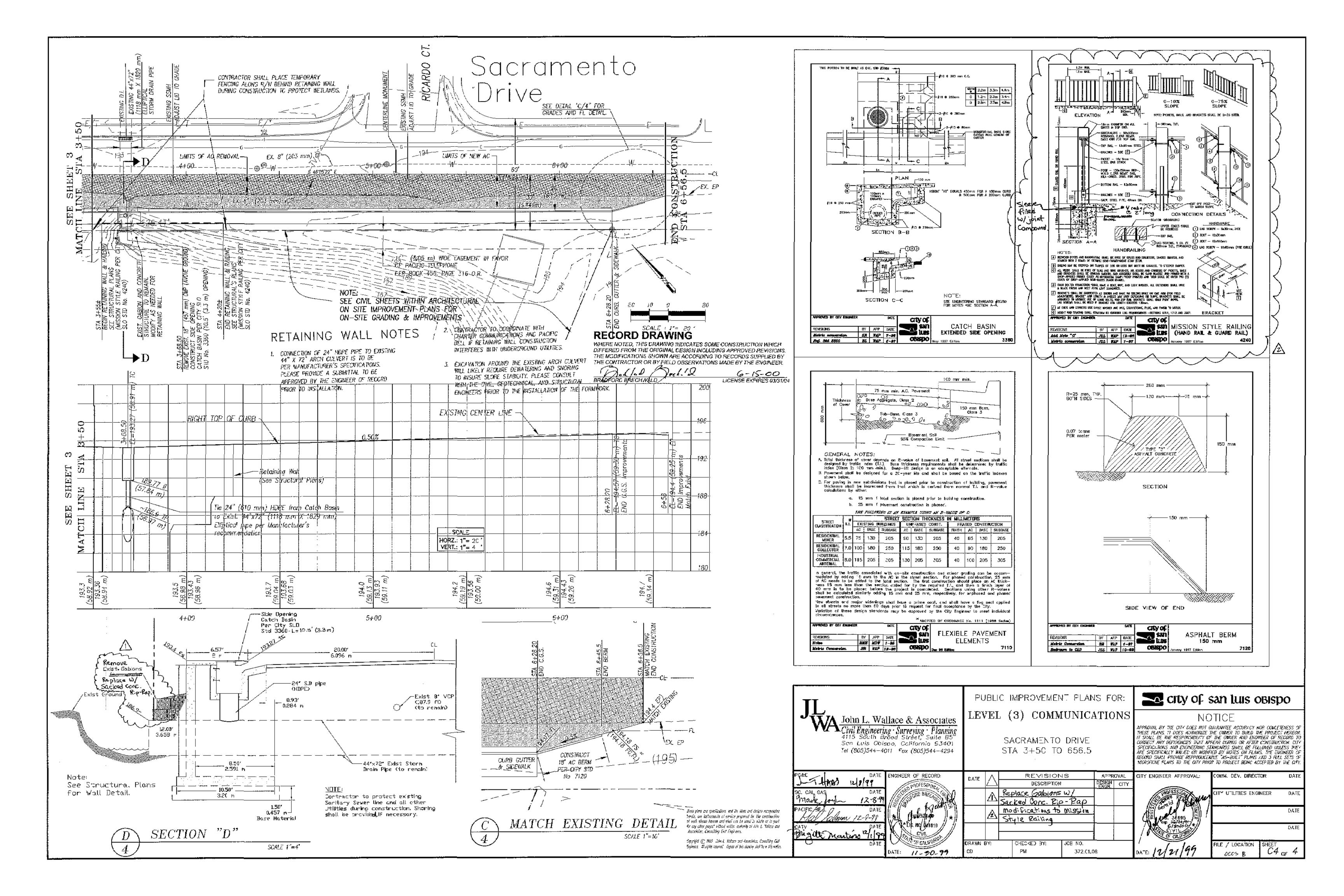
a city of san luis obispo

NOTICE

IPPROVAL BY THE CITY DOES NOT GUARANTEE ACCURACY NOR COMLETENESS OF







JENERAL STRUCTURAL NOTES

- 1 -- GENERAL REQUIREMENTS
- 1.0) Details shown on structural drawings are typical. Similar details apply to similar conditions. Dimensions take precedence over scale. Dimensions on Civil Engineering drawings shall take precedence over dimensions on Structural drawings, and shall govern where no dimensions are shown on the Structural drawings. Notes on the drawings take precedence over General Notes. Conditions requiring construction different from that shown shall be reported to the Engineer. Whenever there is a conflict between requirements shown on the drawings, the more stringent requirement shall
- 1.02 These Structural drawings represent the finished structure, and unless otherwise indicated, they do not show the method of construction. Provide all measures necessary to protect the structure, workmen, and other persons during construction. Provide temporary bracing and shoring for structural elements of sufficient strength and stiffness to resist all imposed loads, including wind and seismic loads. Provide temporary barriers and lighting when necessary. Contractor is solely responsible for the above measures, and shall engage properly qualified persons to determine where and how temporary precautionary measures shall be used, and inspect same in the field. Observation visits to the site by the Engineer shall not include observation of these measures.
- 1.03 Building Codes: Construction shall conform to the applicable sections of the latest edition of the following building codes, these Structural Notes, and to local ordinances. Whenever there is a conflict between codes, the more stringent requirements shall govern.
- A. Uniform Building Code (UBC)
- B. American Concrete Institute, Building Code Requirements for Reinforced Concrete (ACI 318)
- C. Concrete Reinforcing Steel Institute (CRSI) Manual of Standard Practice
- O. State of California, Department of Transportation. Standard Specifications.

1.04 Observation:

- A. The Contractor shall inform the Engineer 24 hours in advance of the following construction stages.
- Reinforcing steel in place.
- Concrete placing operations.
- 8. Special Inspection: The Owner shall retain and pay for the services of a Special Inspector, acceptable to the Engineer, for periodic inspection of concrete reinforcing placement and continuous inspection of concrete placement for all concrete elements. Prior to placing concrete, inspector shall observe size, grade, location and spacing of reinforcing steel. All deviations from the drawings shall be resolved prior to placing concrete. Inspector shall continuously observe concrete placement by verifying proper mix design, placing equipment, and placing procedure including vibration. Inspector shall either observe or perform preparation of concrete test samples. Inspectors shall submit signed reports to the Structural Engineer and Building Official within 2 weeks after each inspection. Names of inspectors and sample report forms shall be submitted to the Engineer and Building Official, Reports shall include notation of elements inspected and deviations from the drawings. Contractor shall advise the Owner at least two weeks prior to the need for a Special Inspector.

1.05 Substitutions:

- A. Whenever any structural product is specified by proprietary name, that specification shall be assumed to be followed by the words "or equivalent". This shall mean equivalent in every way in the opinion of the Engineer.
- B. Submittals: The Contractor shall submit to the Owner all documentation and/or samples required by the Engineer to determine equivalence. All such submittals shall be made at least 2 weeks prior to the incorporation of any such substitution into the project. In no case shall any substitution be made without the written authorization of the Engineer. All submittals shall include all other substitutions or changes required in adjacent construction and/or by other trades to accomplish the substitution.
- C. Payment: Any acceptance of a substitution by the Engineer shall not authorize any extension of time or additional expense to the Owner. Contractor shall pay through the Owner for any additional testing or inspection of any substitution as may be required by the Engineer.
- 1.06 Acrisions: Revisions shall be made only upon direction of the Engineer. The Building Official, Building Inspector, and Special Inspectors are not empowered to make any revisions to the grawings or specifications. Any revision made by the Contractor at the direction of anyone other than the Engineer is undertaken completely at the Contractor's risk.

1.07 Existing Conditions:

- A. The Contractor is presumed to have visited the site and familiarized himself with existing conditions prior to submitting a bid.
- B. Existing grades indicated on the drawings are approximate
- C. Existing Construction: Existing construction shown on the drawings is shown schematically and may not exist exactly as shown. Any existing construction or conditions encountered which require construction different from that shown shall be reported to the Engineer. Take all measures necessary to protect existing construction from damage during construction. If such damage does occur, restore existing construction to essentially original condition as directed by the Engineer.
- D. All:structural elements noted are new and shall be provided unless specifically noted to be existing.
- E. Dimensions: Verify all dimensions in the field. It is the intent of these drawings that the new construction be installed in alignment with existing construction as indicated. Dimensions shown are approximate only and shall be adjusted in the field as required to accomplish this intent.
- F. Thoroughly inspect all existing structural elements exposed during construction. Any existing members encountered which are found to be damaged shall be reported the Engineer,

G. Demolition:

- General: Remove existing construction to the lines shown on the drawings or as required to complete the work shown on the drawings.
- 2. Non-Structural Elements: Remove non-structural elements including but not necessarily limited to landscaping and site improvements as required to complete the structural work shown on the drawings.
- 3. Structural Elements: Do not remove any structural elements unless specifically shown on the drawings.
- 4. Existing Concrete and Masonry: Saw cut existing concrete or A.C. paving a minimum of 1" deep prior to demolition. Preserve existing concrete or masonry reinforcing where shown on the drawings. All other reinforcing shall be cut 1° below the concrete surface and patched with cement mortar.
- H. Restoration: Restore all non-structural elements including but not necessarily limited to landscaping and site improvements to essentially original condition as shown on the Civil Engineering drawings.

Adjacent structures:

- Protection: Contractor shall take all measures necessary to protect existing structures from damage during construction. If such damage does occur, restore existing structures to essentially original condition as directed by the Engineer.
- 2. Clearance: Do not place any structure shown on these drawings directly against any other existing or proposed structure unless specifically shown otherwise on these drawings. Provide minimum 1/2" clearance between the structure shown on these drawings and any such existing or proposed structures. For example, retaining wall shall be held a minimum of 1/2" clear of any structure.
- 1.08 Definitions: The following words used on the drawings and/or in the specifications are defined as follows.
- A. Engineer: References to the Engineer shall mean the firm Applied Engineering, the Civil Engineer, or any employee or consultant designated to act on behalf of the Engineer. All written or telephonic communication by the Contractor with the Engineer shall occur through the Civil Engineer, or directly with the Engineer only when so directed by the Civil
- B. Civil Engineer: The firm of John L. Wallace and Associates.
- C. Geotechnical Engineer: The firm of Geo Tek Insite Inc.
- D. Contractor: References to the Contractor shall mean the General Contractor.
- E. Drawings: References to the drawings shall mean the structural drawings prepared by Applied Engineering. Structural drawings show only structural elements. Non-structural elements are shown schematically to indicate their relationship to the structure, and are noted as being designed by others.
- F. Specifications: References to the specifications shall mean these General Structural Notes.
- 6. Shop Drawings: Where indicated, shop drawings shall be submitted to the Engineer. Prior to submittal, shop drawings shall be reviewed and approved by the Contractor. Contractor's review shall verify dimensions and quantities approve means, methods and procedures of construction and installation, and guarantee job site safety. Shop drawings may be reviewed by the Engineer. Such review by the Engineer, if any, will only be for general conformance with the design, and will not be to determine accuracy or completeness of other details such as dimensions and quantities, and will not be to approve means, methods and procedures of construction and installation, nor to review job site safety. Any fabrication of elements shown on shop drawings which is performed prior to two weeks after submittal of shop drawings is undertaken completely at the Contractor's risk.
- H. Inspection: Inspection or inspect shall mean observation of the work to verify substantial compliance with the drawings and specifications to the best knowledge of the inspector. Inspection does not mean absolute compliance with the drawings, specifications or any code.
- I. Special Inspector: An inspector or inspectors retained and paid by the Owner. Comply with UBC 1701.2. Special Inspector shall be acceptable to the Engineer, Special Inspector shall be ICBO certified to inspect the particular type of construction or operation requiring special inspection, or shall be a California Registered Civil Engineer with an area of expertise in the particular type of construction or operation requiring special inspection, or otherwise qualified (in the opinion of the Engineer) to inspect the particular type of construction or operation requiring inspection.
- J. Testing Laboratory: A Testing Laboratory retained and paid by the Owner. Testing Laboratory shall be acceptable to the Engineer. Testing Laboratory personnel shall be supervised by a California Registered Civil Engineer with an area of expertise in the particular type of construction requiring testing.
- 1.09 Construction Limits: See Civil Engineering drawings for limitations on construction access.
- 1.40 Maintenance: The structure shown will require periodic maintenance. The Owner will periodically inspect, or cause to be inspected, the structural elements shown hereon, and will maintain and/or repair any decay or other damage noted by such inspection. Any question regarding extent of damage or need for maintenance or repair shall be referred to a Registered Engineer. Maintenance shall include, but not be limited to:
- A. Repair of erosion or scour. Finish grades shown on the drawings shall be maintained.
- B. Repair of damage to existing sacked concrete rip-rap and gabions. Said structures shall be maintained in at least the existing condition.

5 -- EAUTHHOUK

2.01 Foundation Design:

A. Report: Geotechnical Evaluation, Proposed Retaining Wall, Parcel B. SLD AL 99-086 dated October 12, 1999 and subsequent addendum both prepared by Geo Tek, Insite, Inc. Copies of these reports are available for inspection at the office of the Engineer.

- B. Allowable soil bearing pressure: 2250 psf for dead load plus live load with minimum footing depth of 2'-0" in clayey soils.
- C. Latera) Earth Pressures:
- Active Pressure: 35 pcf.
- Passive Pressure: 100 pcf.
- 3. Friction Coefficient: 0.4.
- 4. Traffic Surcharge: Equivalent to 2'-0° of soil.
- D. Review of Drawings: Foundation plan, details and specifications have been submitted to the Geotechnical Engineer, Geotechnical Engineer shall submit to the Engineer a letter confirming that these documents have been reviewed and found acceptable as required in the report. Do not commence foundation construction until this letter has been submitted and accepted by the Engineer.
- E. Observation: The Owner shall retain and pay for the Geotechnical Engineer, or another qualified Geotechnical Engineer acceptable to the Engineer, to take all field samples and do all laboratory testing necessary to ensure compliance of the work to these structural notes. The Geotechnical Engineer shall submit results of all testing done during the course of the work to the Owner and Engineer, and shall at the completion of the work certify in writing that the work performed by the Contractor under this section complies with the requirements herein.

2.02 Unexpected Site Conditions:

- A. Soils: Allowable values and foundation design are based upon assumed uniform, competent, and globally stable soil conditions shown by test boring logs. Actual soil conditions which deviate appreciably from that shown in the test boring logs, or will require construction appreciably different from that shown on the drawings shall be reported to the Engineer.
- B. Buried Structures: Contractor shall investigate site during clearing and earthwork operations for buried structures not shown on the drawings. Any such structures encountered shall be reported to the Engineer.

2.03 Compaction Requirements:

- A. Reference test: Field tests performed in accordance with ASTM D1556 or ASTM D2922 and D3017 with reference to the maximum dry density determined by ASTM D1557.
- B. Compaction requirements: All fill and backfill materials, and the uppermost i'-0" of material under footings shall be compacted to 90% relative compaction. Jetting of soils to obtain compaction is prohibited. All pumping soils shall be removed and replaced as directed by the Geotechnical Engineer, regardless of compaction test results.
- 2.04 Clearing and stripping: All trees, shrubs, stumps, rubbish. weeds, grass, and all soil containing organic or other deleterious matter, shall be stripped and removed from the structure site. The uppermost 6° of soil is considered a minimum.

2.05 Grading:

- A. Cut: Excavate to depth and extent shown on drawings and as specified herein. Cut slopes shall not exceed 2:1.
- B. Structure Excavation: Excavate for foundations at locations, and to lines and dimensions shown on the drawings. Make allowances for footing forms (if any). Install gravel base Orain or pump all surface and ground Water from excavations. Any foundation which will slope more than 1:15 shall be stepped. Remove debris and loose material from all excavations. Remove and recompact any additional soil required to satisfy compaction requirements. All footing excavations shall be accepted by the Geotechnical Engineer prior to placing concrete.

2.06 Fill and Backfill:

Λ. Materials:

- 1. General: All fill and backfill materials are subject to acceptance by the Geotechnical Engineer. Retaining walls shall not be backfilled until concrete has reached design. strength, or at least 14 days after concrete has been placed, whichever is sooner.
- Site Materials: Existing site materials except those removed during clearing and stripping operation are acceptable for filling and backfilling except where import material is specifically designated. Site material shall be cleaned of all organic matter and irreducible material over 2" in diameter.
- Import materials: Granular, non-expansive, free of organic matter, deleterious substances and irreducible material over 2" in diameter, and having an expansion index less than 20.
- Permeable Backfill:
- a. Floatrock.
- b. 3/4 x #4 grave1.
- c. Class i. Type A or B, or Class 2 permeable material complying with requirements of section 68-1.025 of the Caltrans Standard Specifications.
- 4. Filter fabric: Permeable, non-woven, polyester, nylon, or polypropylene geotextile weighing a minimum of 4 oz. per square yard.
- Perforated Drain Pipe: ASTM D2729, Slope 0.25% minimum to drain to daylight at lowest point of lower grade at locations shown on drawings. Extend drain through wall in sheet metal or PVC sleeve to provide between 1/4" and 1/2" clear to drain pipe.
- B. Preparation: Scarify areas to be filled to a depth of 1'-0". Adjust moisture content of scarified surface to within 3% of optimum moisture content and compact.
- specified herein. O. Placement: Place and compact fill material in lifts not exceeding 8". Fill material shall be within 3% of

optimum moisture. Fill slopes shall not exceed 2:1.

C. Fill: Fill to depth and extent shown on drawings and as

- E. Sub-surface drainage behind retaining walls shall extend from i'-0" below the surface of upper grade to the top of the footing. It shall consist of one of the following assemblies.
- Prefabricated drainage material: Plastic spacing material. and filter fabric of one of the (ollowing manufacturers. Fabric shall be wrapped around perforated drain shown on the drawings.
- a. J-Drain 100 a product of JDA Enterprises.
- b. Amerdrain 480 a product of American Wick Orain Corporation
- c. Eljen PDS a product of Eljen Development Corporation
- d. Enkadrain Type 9D10 a product of Akzo Industrial Systems Company,
- Permeable backfill material enclosed in filter fabric: Perforated drain shall be installed 6" behind wall in the permeable material.

3 -- CONCRETE

3.01 General: All concrete work shall be done in accordance with the latest editions of the ACI Building Code (ACI 318) and the ACI Manual of Concrete Practice,

3.02 Reinforcing Materials:

- A. #3 bars and smaller: ASTM A615 Grade 40 or Grade 60.
- B. #4 bars and larger: ASTM A615 Grade 60.

3.03 Concrete Materials:

- A. Cement: Portland, type II, ASTM C150.
- B. Aggregate: All aggregate shall be innocuous in accordance with ASTM C289.
- Fine aggregate: ASTM C33.
- Coarse aggregate: ASTM C33, 3/4" or 1" heavy media processed aggregate.
- C. Water: Potable, clean, and pure. This requirement applies to water used in mix as well as to water for aggregate washing and for curing.
- D. Ready-mixed concrete: ASTM C94.
- E. Water reducing admixture: Polyheed 997 or Polyheed IA at the rate of 6 oz per cwt., Pozzolith 300R, 300N, or 322N at the rate of 5 oz. per cwt., Zeecon at the rate of 6.8 oz. per cwt., Zeecon H at the rate of 6 oz. per cwt., or Grace WRDA-79 at the rate of 8 oz. per cwt.
- F. Fly Ash: Fly ash complying with ASTM CG18, class F shall be used to replace cement between 15% and 18% by weight.
- 3.04 Concrete Strength: 3000 psi @ 28 days.
- 3.05 Concrete Consistency: Maximum slump = 4 1/2" per ASTM
- 3.06 Concrete Proportioning:
- A. Mix Design: Submit for review by the Engineer. Mix design shall be specific to this project.
- B. Maximum water-cement ratio: 6.0 gal, per sack.
- C. Minimum Cement Content: 6.0 sacks per yard.
- 3.07 Miscellaneous materials:
- A. Gravel base under Footing: 1" or 1 1/2" clean coarse angular gravel acceptable to the Geotechnical Engineer.
- B. Expansion joint filler: 1/2" thick unless otherwise shown, Comply with Specifications for Preformed Expansion Joint Fillers for Concrete (Non-extruding and resilient, Non-bituminous Types), ASTM D1752.
- C. Non-shrink grout: SikaGrout 212 or acceptable equivalent
- D. Anchor bolts: ASTM A307. Bolts shall have cut threads. Bolts with rolled threads are not permitted, Unless otherwise noted, minimum embedment shall be as shown in UBC Table 19-E, but not less than 4" minimum. "All Thread" is not permitted unless a certificate of compliance or test report is submitted to the Engineer. The Certificate of compliance shall be signed by a representative of the supplier and shall certify that the product complies with this specification.
- E. Adhesive anchors: Hilti HIT HY-150 System in accordance with ICBO Evaluation Report 5193 or acceptable equivalent shall be used to connect wood or steel to concrete where indicated on the drawings, and with the written permission of the Engineer, may be used where anchor bolts or grouted machine bolts are indicated on the drawings.
- F. Cement grout, mortar and drypack: Proportions by volume shall be 2 parts sand, i part cement and a minimum of water consistent with placing requirements.
- G. Curing compound: At unformed concrete surfaces including formed surfaces where forms are removed prior to the end of the curing period: Clear liquid membrane all resin, water based curing compound conforming to ASTM C309, Type i. Class B. W.A. Meadows Sealtight 1100 or acceptable
- 3.08 Welding of reinforcing steel: Reinforcing steel shall not be heated or welded unless specifically detailed on the drawings or directed by the Engineer.
- 3.09 Lap splices: 60 bar diameters for #6 bars and smaller, or 78 bar diameters for #7 bars and larger, or 2'-0" whichever is greater. Reinforcing bars shall not be offset at splices unless explicitly shown on drawings.
- 3.10 Concrete curing: Keep unformed concrete continuously wet for 7 days, or where floor finish permits, apply curing
- 3.11 Form removal: Hemove forms in accordance with the following schedule:
- A. Side forms of footings: Minimum 2 days.

equivalent.

B. Walls: Minimum 7 days. Wall forms may be removed after 4 days if curing is performed as specified for unformed surfaces.

3.12 Vibration: Vibrate all concrete in place with an internal mechanical vibrator used by experienced personnel.

3.13 Testing:

- A. Laboratory: The Owner shall retain and pay for the services of a Testing Laboratory acceptable to the Engineer, Where samples will be tested in accordance with these structural notes and applicable standards of ASTM. Work under this section to be performed by the Contractor includes the following:
- Provide a minimum of 24 hours notice to the Engineer and Testing Laboratory prior to concrete placing operations.
- 2. Provide access for Testing Laboratory personnel and equipment, and coordinate and schedule concrete pours to allow for testing.
- Provide field storage facilities as directed for compression cylinders.
- B. Samples: For each day's pour, or each 150 yards of concrete. or more often as directed, make three test cylinders.

C. Testing of samples: Test one cylinder at 7 days and two at 28

D. Test reports: A copy of all test reports shall be submitted

to the Structural Engineer.

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MZ # S

BY: DMC

DATE: 29-NOV-99

JOB: 299058

STRUCTURAL SHEET INDEX

RETAINING WALL GENERAL STRUCTURAL NOTES RETAINING WALL PLAN, PROFILE AND DETAILS S-2

RETAINING WALL SECTIONS S-3 RETAINING WALL SECTION, SCHEDULE, AND DETAILS

city of san luis obispo

NOTICE

APPROVAL BY THE CITY DOES NOT GUARANTEE ACCURACY NOR COMLETENESS (THESE PLANS. IT DOES AUTHORIZE THE OWNER TO BUILD THE PROJECT HEREON, IT SHALL BE THE RESPONSIBILITY OF THE OWNER AND ENGINEER OF RECORD CORRECT ANY DEFICIENCIES THAT APPEAR DURING OR AFTER CONSTRUCTION. O SPECIFICATIONS AND ENGINEERING STANDARDS SHALL BE FOLLOWED UNLESS THE ARE SPECIFICALLY WAIVED OR MODIFIED BY NOTES ON PLANS. THE ENGINEER O RECORD SHALL PROVIDE REPRODUCEABLE "AS-BUILT" PLANS AND 3 FULL SETS OF MICROFICHE PLANS TO THE CITY PRIOR TO PROJECT BEING ACCEPTED BY THE CIT

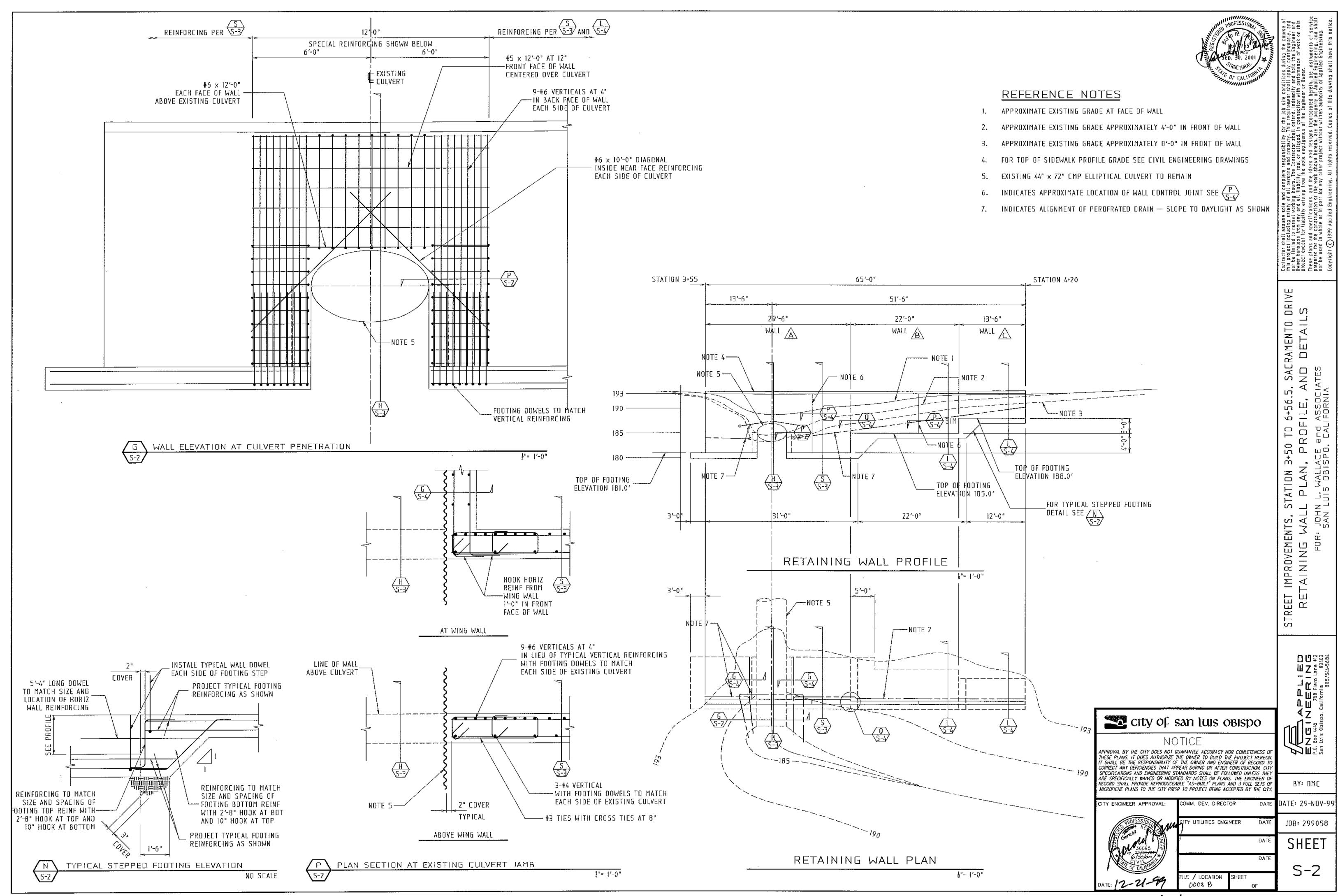
CITY ENGINEER APPROVAL:

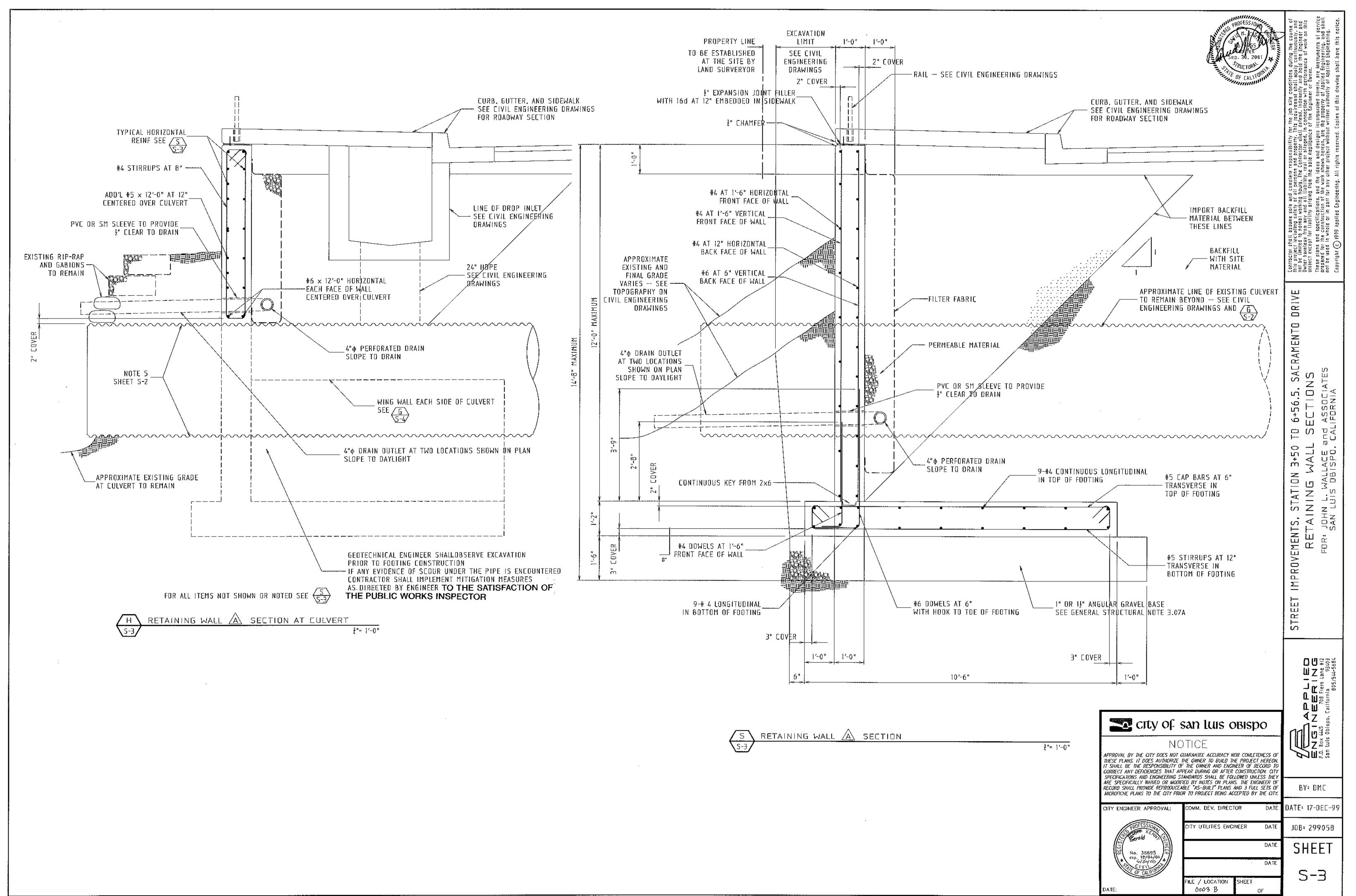
COMM. DEV. DIRECTOR CITY UTILITIES ENGINEER DATE

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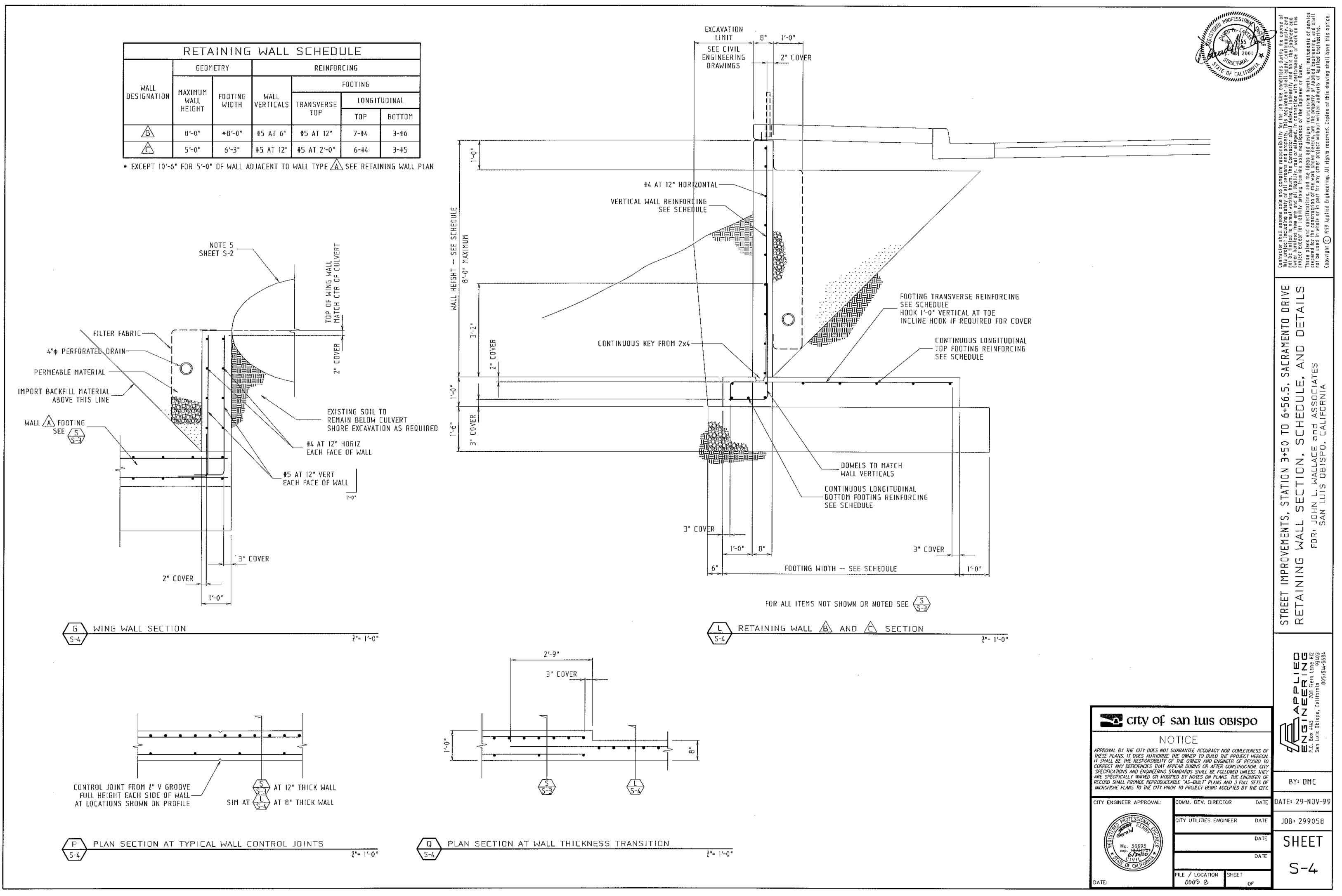
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FILE / LOCATION SHEET

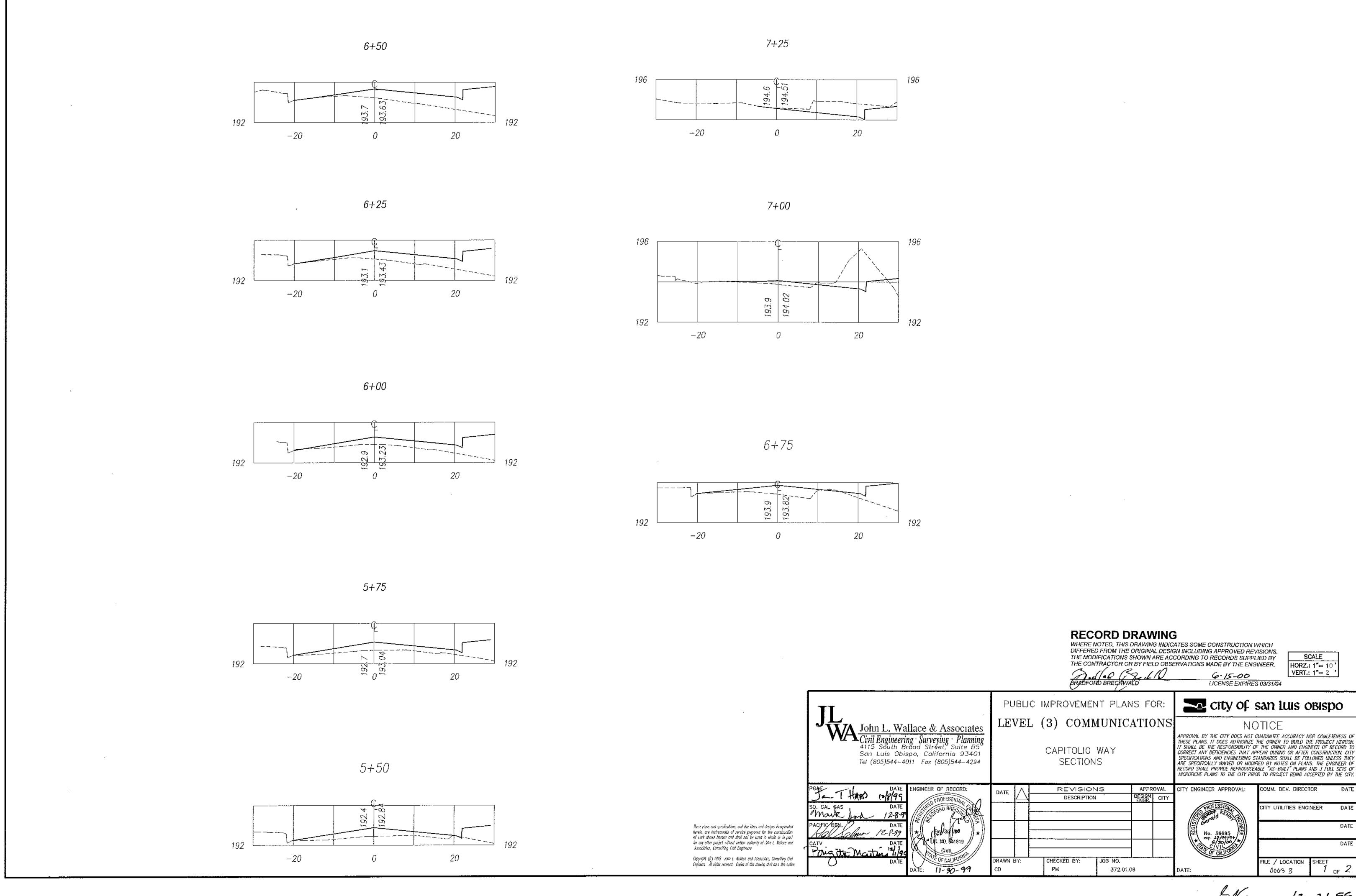




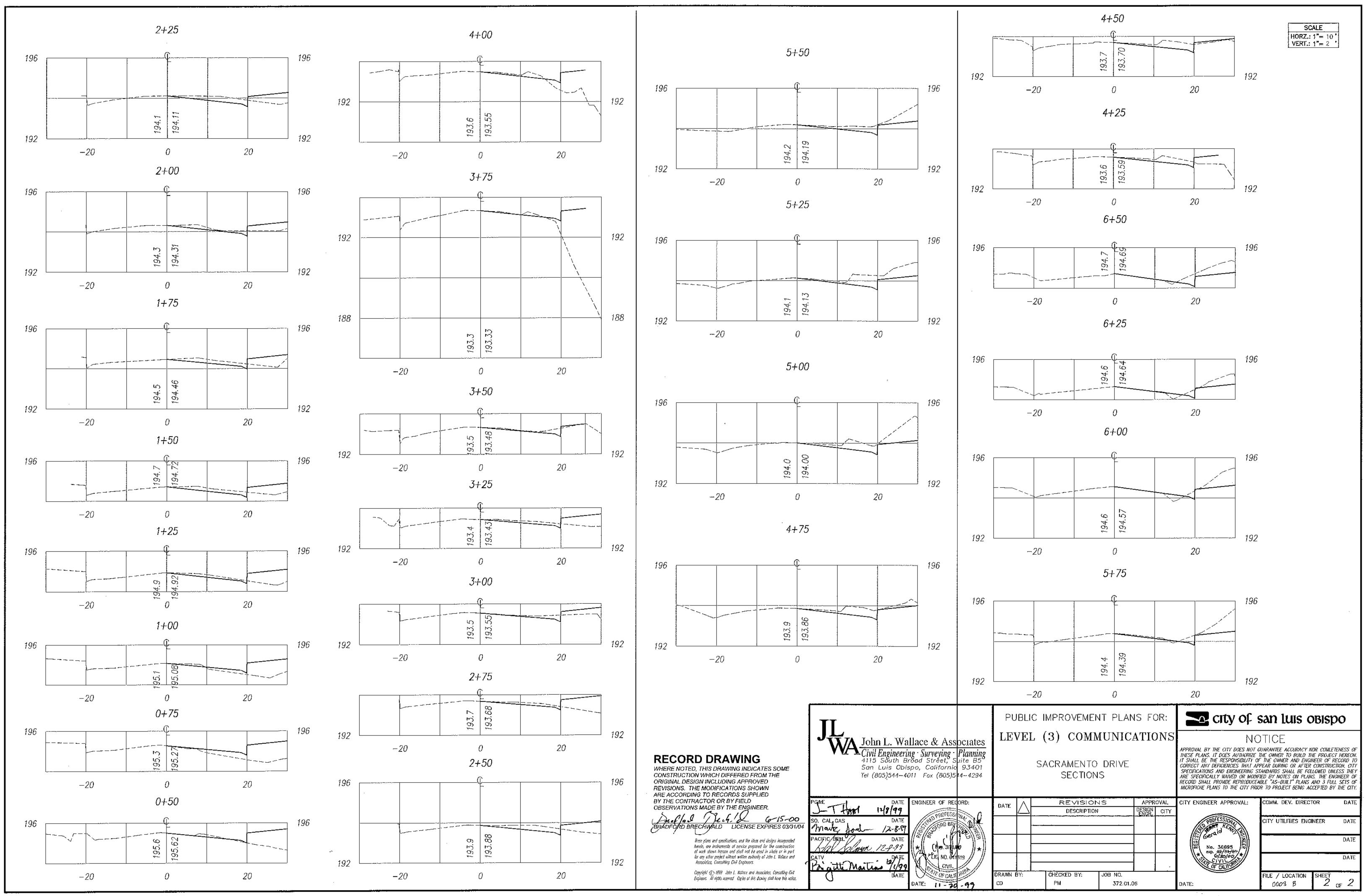
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