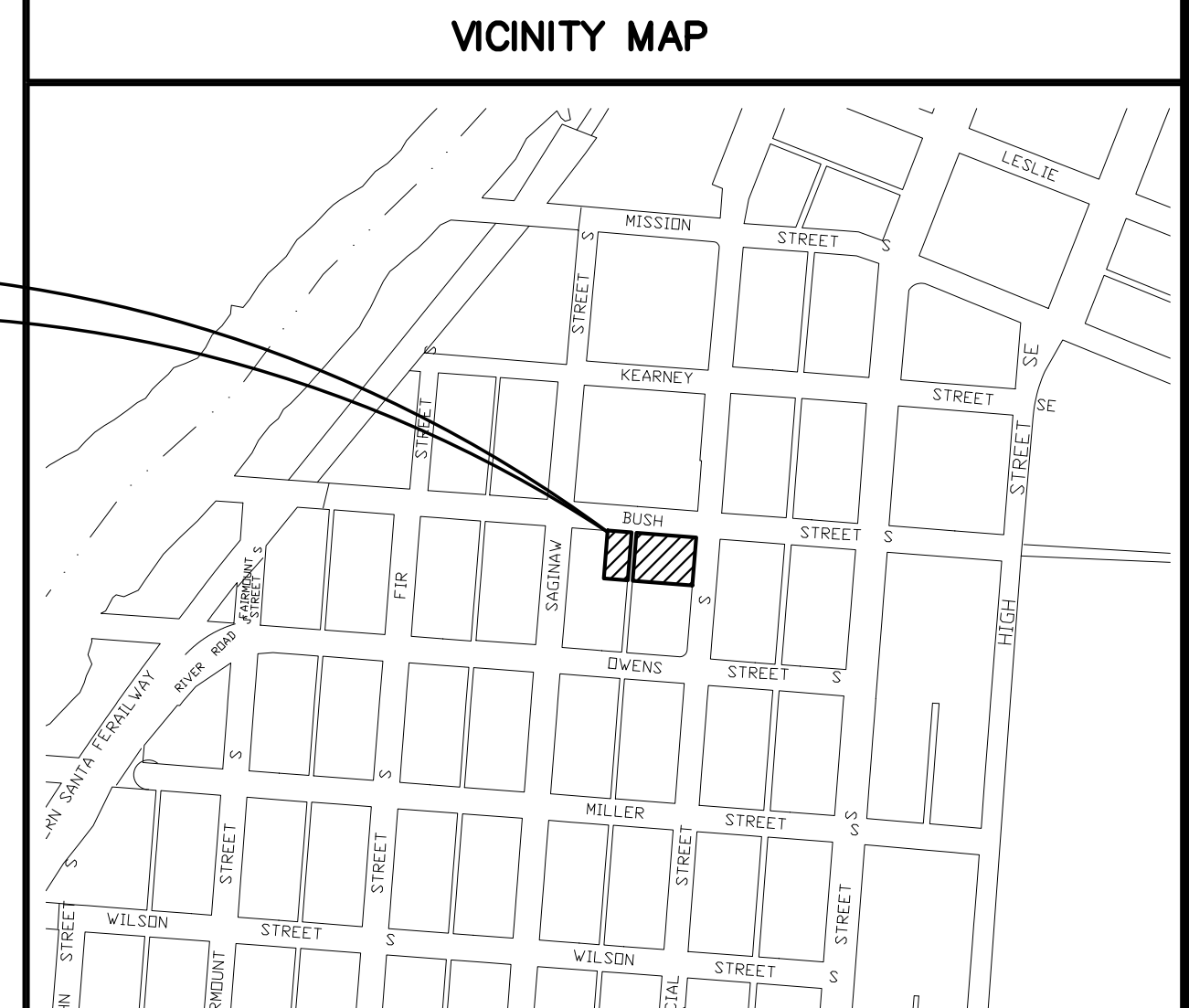


FOR:

ATTN: AARON TERPENING, AIA
CB|TWO ARCHITECTS
500 LIBERTY ST. SE SUITE 100
SALEM OREGON

PROJECT LOCATION



SHEET LIST TABLE	
SHEET #	SHEET TITLE
C0.0	COVER SHEET, VICINITY AND LOCATION MAPS, DRAWING INDEX
C1.0	EXISTING CONDITIONS, DEMOLITION & EROSION CONTROL PLAN
C1.1	EROSION CONTROL NOTES
C1.2	EROSION CONTROL DETAILS
C1.3	POST-DEVELOPMENT EROSION CONTROL PLAN
C2.0	GRADING & DRAINAGE PLAN
C3.0	UTILITY PLAN
C4.0	SURFACING PLAN
C5.0	CIVIL NOTES
C6.0	CONSTRUCTION DETAILS
C6.1	CITY DETAILS

[illegible]

WE

WESTECH ENGINEERING, INC.
CONSULTING ENGINEERS AND PLANNERS

3841 Farview Industrial Dr. S.E., Suite 100, Salem, OR 97303
Phone: (503) 585-2474 Fax: (503) 585-3986
E-mail: westech@westech-eng.com

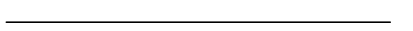
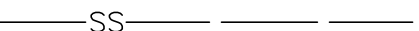




















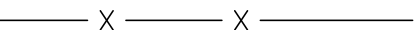

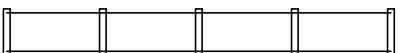
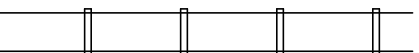

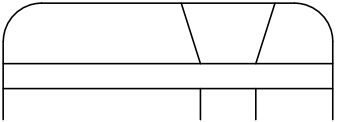
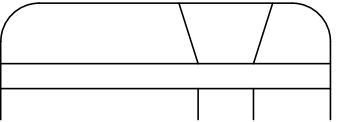


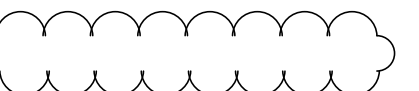


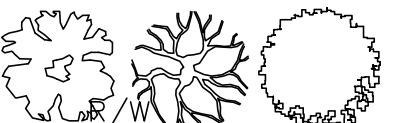



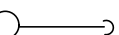















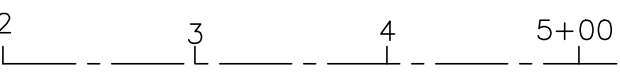
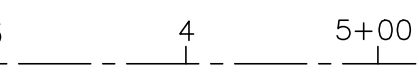



CBTWO ARCHITECTS

1035 COMMERCIAL ST – MIXED USE

COVER SHEET, VICINITY AND
LOCATION MAPS, DRAWING
INDEX

DRAWING
C0.0

JOB NUMBER
3429.0000

ITEM	PROPOSED	EXISTING		
SANITARY SEWER			BARRICADE	
STORM DRAIN			FLOW DIRECTION	
WATER			TELEPHONE MANHOLE	
GAS			TELEPHONE PEDESTAL	
TELEPHONE			SANITARY SEWER MANHOLE	
POWER			STORM DRAIN MANHOLE	
TELEVISION			CATCH BASIN	
FENCE			JUNCTION BOX	
RAILROAD			FIRE HYDRANT AND VALVE	
CURB, DRIVEWAY, P.C.C. SIDEWALK			WATER METER	
HEDGE OR BRUSH			WATER VALVE	
TREES			POWER POLE	
STREET OR ALLEY RIGHT OF WAY			POWER POLE W/ANCHOR	
PLATTED LOT LINE			POLE W/LUMINAIRE	
PLATTED LOT LINE (ABANDONED)			LIGHT POLE	
OWNERSHIP LINE			SIGN POST	
EASEMENT OR TEMPORARY RIGHT OF WAY			MAILBOX	
IMPROVEMENT DISTRICT BOUNDARY			TRAFFIC SIGNAL	
PROJECT CENTERLINE AND STATIONING			X-WALK SIGNAL	
CITY LIMITS LINE				

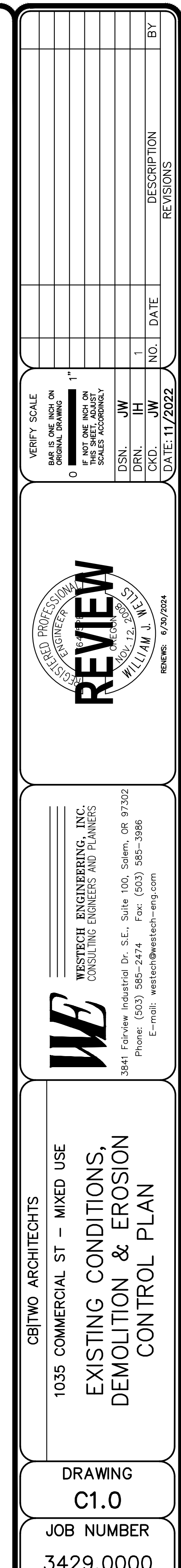
BUSH BARN ENTRANCE, EAST OF HIGH ST,
252' EAST OF EAST CURB HIGH ST,
IN NORTH CONC CURB OF HIGH ST ENTRANCE TO BUSH BARN,
49.5' EAST OF A LIGHT POLE, 45.7' WEST OF LIGHT POLE

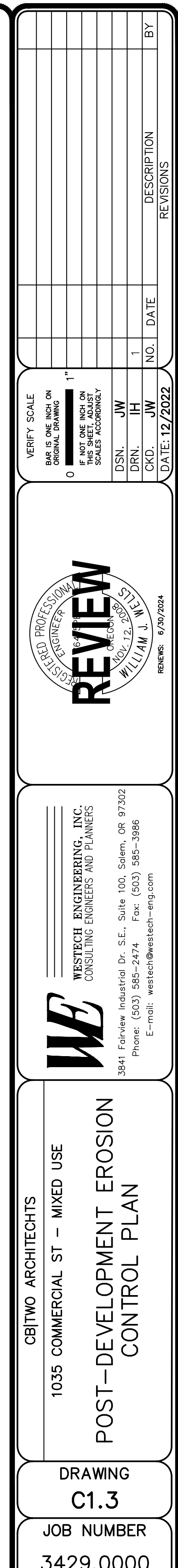
DISCLAIMER: UTILITIES DEPICTED ARE BASED ON EVIDENCE FOUND IN THE FIELD, MUNICIPALITY AND/OR OTHER GOVERNMENT ENTITY AS-BUILT PLANS, CONTRACTOR PLANS AND OTHER DOCUMENTS OF RECORD. BARKER SURVEYING ASSUMES NO RESPONSIBILITY FOR UTILITIES THAT ARE NO LONGER IN USE, INSTALLED AFTER THE DATE OF ACTUAL SURVEY, NOT IDENTIFIED OR NOT LOCATED. THIS INCLUDES UTILITIES UPON PUBLIC OR PRIVATE PROPERTY.

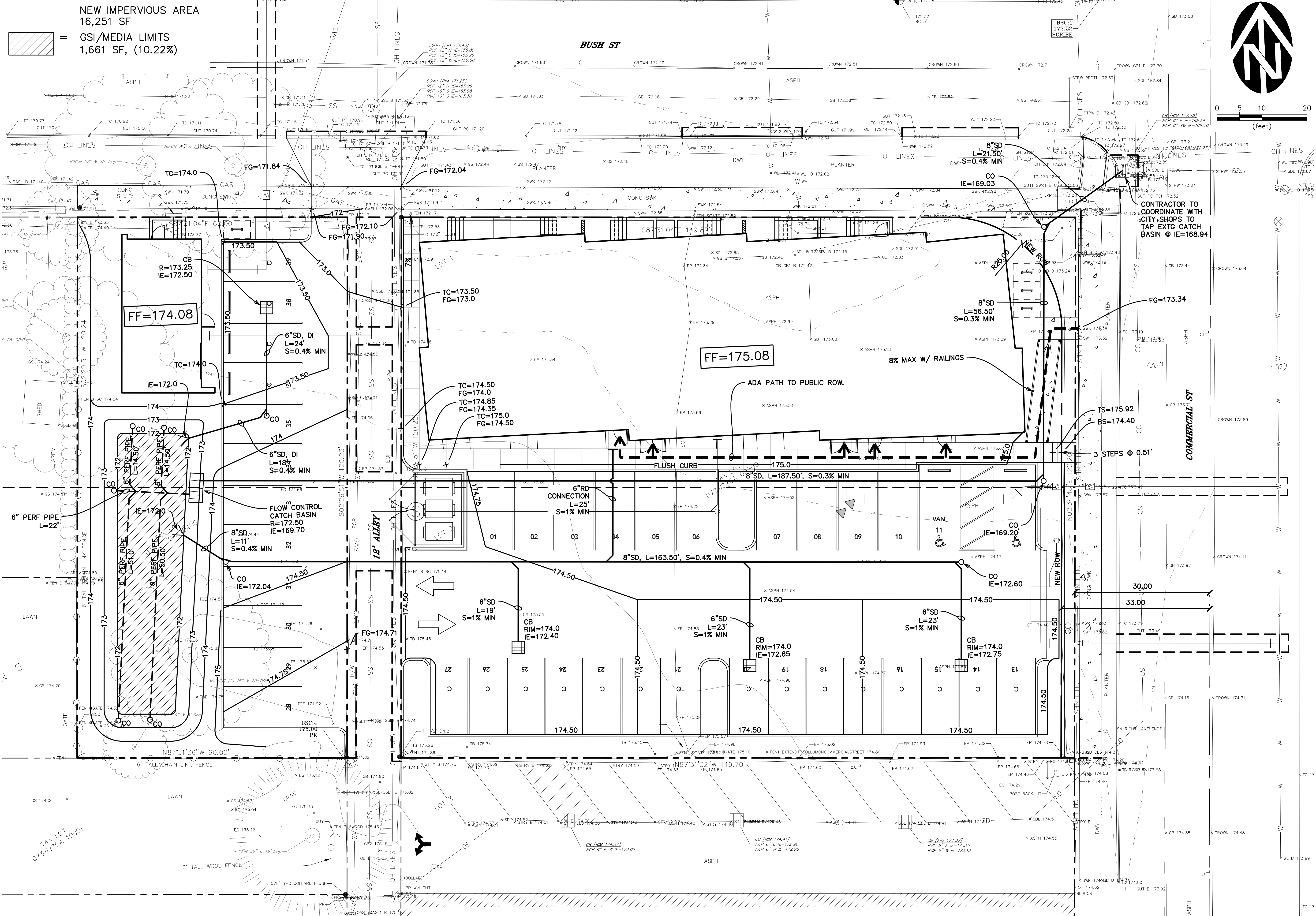
SPECIFIC UTILITY POSITIONS INDICATED ON THE GROUND SURFACE PROVIDED BY LOCATION SERVICES MAY VARY DUE TO UNDERGROUND DETECTION CAPABILITIES.



Know what's below.
Call before you dig.







REVISIONS		DATE		BY	
NO.	DESCRIPTION	NO.	DATE	NO.	BY
1		1	01/2023		

VERIFY SCALE
1" = 20'
IF NOT ONE INCH ON
ORIGINAL DRAWING
SCALE, VERIFY
SCALES ACCURACY

DRN. JW
CHKD. JW
DATE: 01/2023

REGISTERED PROFESSIONAL ENGINEER
WILLIAM J. WEST
No. 12,345
W. J. WEST

WESTTECH ENGINEERING, INC.
CONSULTING ENGINEERS AND PLANNERS
3841 Fairview Industrial Dr. S.E., Suite 100, Salem, OR 97302
Phone: (503) 585-2474 Fax: (503) 585-3986
E-mail: westtech@westtech-eng.com

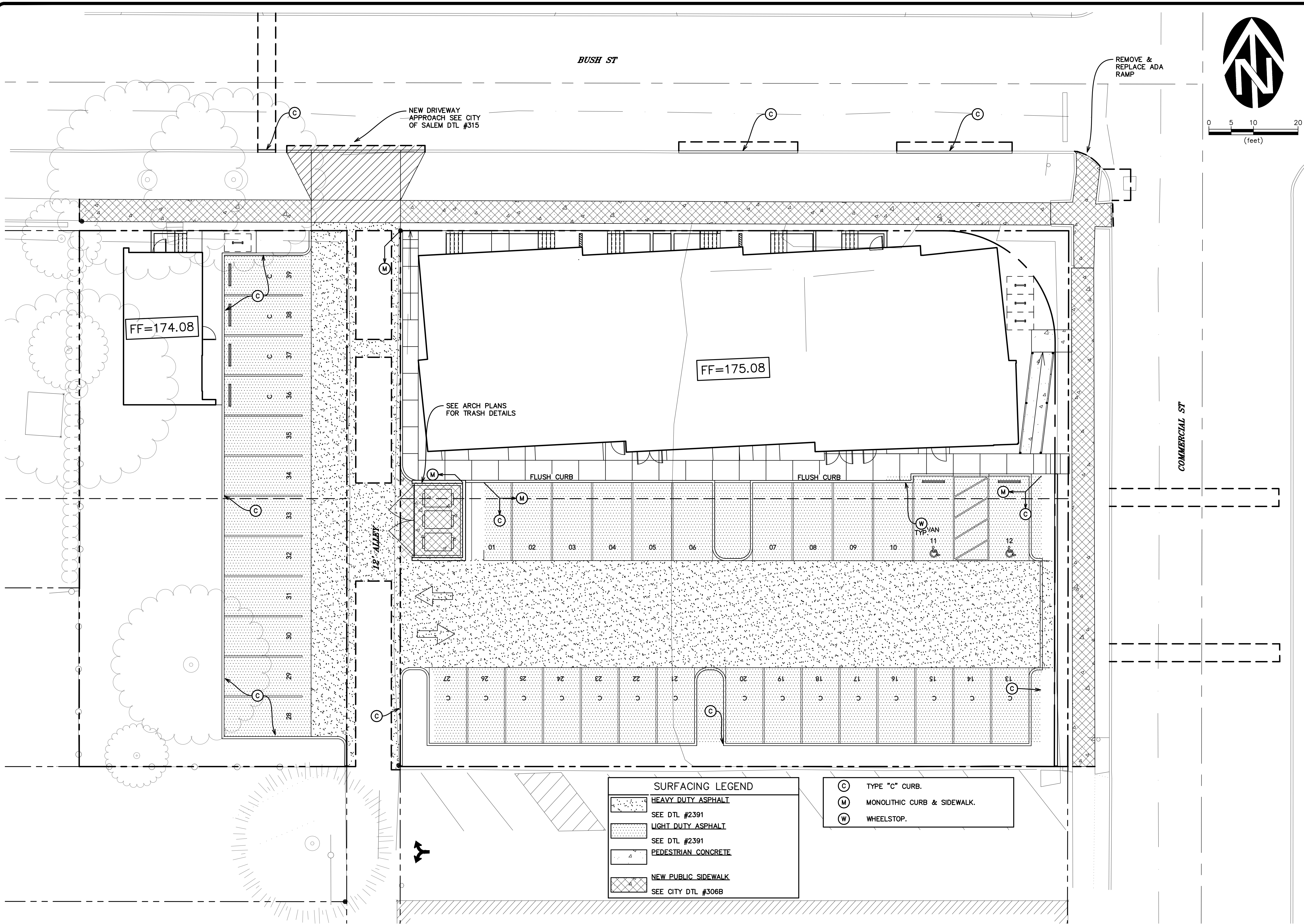
CB|TWO ARCHITECTS
1035 COMMERCIAL ST - MIXED USE

GRADING & DRAINAGE PLAN

DRAWING C2.0

JOB NUMBER 3429.0000

1/11/2023 3:08:19 PM
R:\Dwg\GB2_ARCHITECTS\1035 Commercial St - Mixed Use\Arch\Plots\C4.0 - Surfacing Plan.dwg (C4.0 tab)



SURFACING LEGEND	
	HEAVY DUTY ASPHALT SEE DTL #2391
	LIGHT DUTY ASPHALT SEE DTL #2391
	PEDESTRIAN CONCRETE
	NEW PUBLIC SIDEWALK SEE CITY DTL #306B

	TYPE "C" CURB.
	MONOLITHIC CURB & SIDEWALK.
	WHEELSTOP.

CB TWO ARCHITECTS		1035 COMMERCIAL ST - MIXED USE		DRAWING	
				C4.0	
				JOB NUMBER	
				3429.0000	
				DATE: 11/2022	
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GENERAL NOTES

- Contractor shall procure, and conform to all construction permits required by the City of Salem.
 - Owner to pay all project permit costs, including but not limited to utility tapping, TV, and chlorination costs. The Contractor shall coordinate with the Approving Agency to determine appropriate fees and provide the Owner with 48 hours notice prior to the required payment of fees or costs.
 - Oregon law requires the Contractor to follow rules adopted by the Oregon Utility Notification Center. Those rules are set forth in OAR 952-001-0010 through OAR 952-001-0090. Obtain copies of the rules by calling the center. (Note: the telephone number for the Oregon Utility Notification Center is 503-232-1987).
 - Contractor to notify City and all utility companies a minimum of 48 business hours (2 business days) prior to start of construction, and comply with all other notification requirements of the Approving Agency with jurisdiction over the work.
 - Contractor shall provide all bonds and insurance required by public and/or private agencies having jurisdiction. Where required by public and/or private agencies having jurisdiction, the Contractor shall submit a suitable maintenance bond prior to final payment.
 - For City Construction Permits, contact Salem Public Works Engineering Construction Management at 503-588-5211. For City Building Permits, contact Salem Permit Application Center at 503-588-6256.
 - Contractor to apply for services at the Permit Application Center (PAC office) for work to be done by City forces on public mains.
 - All materials and workmanship for facilities in street right-of-way or easements shall conform to Approving Agencies' construction specifications wherein each has jurisdiction, including but not limited to the City, County, Oregon Health Division (OHD) and the Oregon Department of Environmental Quality (DEQ).
 - Unless otherwise approved by the Public Works Director, construction of all public facilities shall be done between 7:00 a.m. and 6:00 p.m., Monday through Saturday.
 - The Contractor shall perform all work necessary to complete the project in accordance with the approved construction drawings including such incidentals as may be necessary to meet the Approving Agencies' requirements and provide a completed project.
 - In any inspection by the City or other Approving Agency shall not, in any way, relieve the Contractor from its obligation to perform the work in strict compliance with the contract documents, applicable codes, and Approving Agency requirements.
 - Contractor shall maintain one complete set of approved drawings on the construction site at all times where work shall proceed. Contractor shall record all approved construction drawings, as well as the station locations and depths of all existing utilities encountered. These field record drawings shall be kept up to date at all times and shall be available for inspection by the Approving Agency or Owner's Representative upon request. Failure to conform to this requirement may result in delay in payment and/or final acceptance of the project.
 - Upon completion of construction of all new facilities, Contractor shall submit a clean set of field record drawings containing all as-built information to the Engineer. All information shown on the Contractor's field record drawings shall be subject to verification. If significant errors or deviations are noted, an as-built survey prepared and stamped by a registered professional Land Surveyor shall be completed at the Contractor's expense.
 - The contractor shall retain and pay for the services of a registered Civil Engineer and/or Land Surveyor licensed in the State of Oregon to establish construction control and perform initial construction surveys to establish the lines and grades of improvements as indicated on the drawings. Staking for buildings, structures, curbs, gravity drainage pipes/structures and other critical improvements shall be completed using equipment accurate to 0.04 feet horizontally and 0.02 feet vertically, or better. Use of GPS equipment for final construction staking of these critical improvements is prohibited. The registered professional surveyor shall provide the design engineer with copies of all grade sheets for construction staking performed for the project.
 - See architectural drawings for site lighting, site dimensioning, and continuation of all utilities.
- TRAFFIC CONTROL
- Contractor shall erect and maintain barricades, warning signs, traffic cones (and all other traffic control devices required) per City requirements in accordance with the current MUTCD (including Oregon amendments). Access to driveways shall be maintained at all times. All traffic control measures shall be approved and in place prior to any construction activity. Prior to any work in the existing public right-of-way, Contractor shall submit final traffic control plan to the Approving Agency for review and issuance of a Lane Closure or Work in Right-of-Way Permit.
 - Prior to any work in the existing right-of-way, Contractor shall submit final traffic control plan to City of Salem for review and issuance of lane closure permit. Contractor to obtain a lane closure permit before construction starts for any work within the existing public right-of-way, including public street improvements or driveway connections to existing streets.

TESTING AND INSPECTION:

- For public and private improvements, the Contractor shall be responsible to ensure that all required or necessary inspections are completed by authorized inspectors prior to proceeding with subsequent work which covers or that is dependent on the work to be inspected. Failure to obtain necessary inspection(s) and approval(s) shall result in the Contractor being fully responsible for all problems and/or corrective measures arising from uninspected work.
- Unless otherwise specified, the attached "Required Testing and Frequency" table outlines the minimum testing schedule for private improvements on the project. This testing schedule is not complete, and does not relieve the Contractor of the responsibility of obtaining all necessary inspections or observations for all work performed, regardless of who is responsible for payment. Cost for retesting shall be borne by the Contractor.

EXISTING UTILITIES & FACILITIES:

- The location and descriptions of existing utilities shown on the drawings are compiled from available records and/or field surveys. The Engineer or utility companies do not guarantee the accuracy or the completeness of such records. Contractor shall field verify locations and sizes of all existing utilities prior to construction.
- Utility locations are based on record information and should be field-verified. Call 1-800-332-2344 at least 48 hours prior to construction for on-site locating of utilities.
- Contractor shall field verify location and depth of all existing utilities where new facilities cross. All utility crossings marked or shown on the drawings shall be potholed using hand tools or other non-invasive methods prior to excavating or boring. Contractor shall be responsible for exposing potential utility conflicts far enough ahead of construction to make necessary grade or alignment modifications without delaying the work. If grade or alignment modification is necessary, Contractor shall notify the Design Engineer, and the Design Engineer or the Owner's Representative shall obtain approval from the Approving Agency prior to construction.
- The Contractor shall be responsible for locating and marking all existing survey monuments of record (including but not limited to property and street monuments) prior to construction. If any survey monuments are removed, disturbed or destroyed during construction of the project, the Contractor shall retain and pay for the services of a Registered Professional Surveyor licensed in the State of Oregon to reference and replace all such monuments prior to final payment. The monuments shall be replaced within a maximum of 90 days, and the County Surveyor shall be notified in writing as required by per ORS 209.150.
- All facilities shall be maintained in-place by the Contractor unless otherwise shown or directed. Contractor shall take all precautions necessary to support, maintain, or otherwise protect existing utilities and other facilities at all times during construction. Contractor to leave existing facilities in an equal or better-than-original condition and to the satisfaction of the Approving Agency and Owner's Representative.
- Utilities or interfering portions of utilities that are abandoned in place shall be removed by the Contractor to the extent necessary to accomplish the work. The Contractor shall plug the remaining exposed ends of abandoned utilities after appropriate verification procedures have taken place.
- Contractor shall remove all existing signs, mailboxes, fences, landscaping, etc., as required to avoid damage during construction and replace them to existing or better condition.
- The Contractor shall be responsible for managing construction activities to ensure that public streets and right-of-ways are kept clean of mud, dust or debris. Dust abatement shall be maintained by adequate watering of the site by the Contractor.

GRADING, PAVING & DRAINAGE:

- All materials and workmanship for compaction, fills, grading, rock and paving within the public right-of-way shall conform to City of Salem Standard Construction Specifications.
- Unless otherwise noted, all grading, rock and paving to conform to Oregon Standard Specifications for Construction (OSSC/ODOT/APWA), 2021 edition.
- Clear and grub within work limits all surface vegetation, trees, stumps, brush, roots, etc. Do not damage or remove trees except as approved by the Owner's Representative or as shown on the drawings. Protect all roots two inches in diameter or larger.

- Strip work limits, removing all organic matter, which cannot be compacted into a stable mass. All trees, brush, and debris associated with clearing, stripping or grading shall be removed and disposed of off-site.
 - Except as otherwise allowed by the specifications required by Salem Standard Construction Specifications, drawing details or notes, immediately following stripping and grading operations, compact subgrade to 92% of the maximum dry density per AASHTO T-180 test method (Modified Proctor). Subgrade must be inspected and approved by the Owner's authorized representative before placing, engineered fills or fine grading for base rock.
 - Unless otherwise required by Salem Standard Construction Specifications, Engineered fills shall be constructed and compacted in 6" lifts over approved subgrade. All fills shall be engineered and comply with the Oregon Structural Specialty Code, with each lift compacted to 92% of the maximum dry density per AASHTO T-180 test method (Modified Proctor).
 - Unless otherwise required by Salem Standard Construction Specifications, Granular base/rock shall conform to the requirements of OSSC (ODOT/APWA) 02630.10 (Dense Graded Base Aggregate), with no more than 10% passing the #40 sieve and no more than 5% passing the #200 sieve.
 - Compact granular base/rock to 92% of the maximum dry density per AASHTO T-180 test method (Modified Proctor). Written base/rock compaction test results from an independent testing laboratory must be received by the Owner's authorized representative before placing AC pavement, and a finished rock grade proof-roll (witnessed by the Owners authorized representative) must be performed.
 - Unless otherwise required by Salem Standard Construction Specifications, A.C. pavement shall conform to OSSC (ODOT/APWA) 00745 (Hot Mixed Asphalt Concrete Pavement) for standard duty mix. Unless otherwise specified or shown on the drawings, base lifts shall be 3/4" dense graded mix, while wearing courses shall be 1 1/2" dense graded mix. Unless otherwise specified or shown on the drawings, A.C. pavement for parking lots and streets shall be Level 2 mix (50 blow Marshall) per OSSC (ODOT/APWA) 00744.13. A.C. Pavement shall be compacted to a minimum of 91% of maximum density as determined by the Rice standard method. Written AC pavement compaction test results from an independent testing laboratory must be received by the Owner's authorized representative before final payment.
 - Pavement surface shall be a smooth, well-sealed, tight mat without depressions or bird baths. Bony or open graded pavement surfaces shall be repaired to the satisfaction of the Owner's authorized representative, prior to final acceptance of the work.
 - Unless otherwise required by Salem Standard Construction Specifications, HMAC mixtures shall be placed only when the surface is dry and weather conditions are such that proper handling, finishing and compaction can be accomplished. In no case shall bituminous mixtures be placed when the surface temperature is below the minimum established under 2021 OSSC (ODOT/APWA) 00744.40 (AC - Season and Temperature Limitations) or the project specifications, whichever is more stringent.
 - Contractor shall protect new pavement against traffic as required, until it has cooled sufficiently to avoid tracking.
 - For parking lots or private access drives, the final lift of AC pavement shall not be placed until after the building is fully enclosed and weatherproof, unless otherwise approved by the Owner's authorized representative.
 - Unless otherwise shown on the drawings or details, straight grades shall be run between all finish grade elevations and/or finish contour lines shown (exception: where grades are shown across sidewalks, slopes shall be adjusted to ensure that maximum allowable sidewalk cross slopes are not exceeded).
 - Finish pavement grades at transition to existing pavement shall match existing pavement grades or be feathered past joints with existing pavement as required to provide a smooth, free draining surface.
 - All existing or constructed manholes, cleanouts, monument boxes, gas valves, water valves and similar structures shall be adjusted to match finish grade of the pavement, sidewalk, landscaped area or median strip wherein they lie. Verify that all valve boxes and risers are clean and centered over the operating nut.
 - Unless otherwise shown on the drawings, no cut or fill slopes shall be constructed steeper than 3H:1V.
 - Unless otherwise shown on the landscape plans, all planter areas, shall be backfilled with approved topsoil minimum 8" thick. Stripping materials shall not be used for planter backfill.
 - Contractor shall seed and mulch (uniformly by hand or hydroseed) all exposed slopes and disturbed areas which are to be landscaped, including trench restoration areas. If the Contractor fails to apply seed and mulch in a timely manner during periods favorable for germination, or if the seeded areas fail to germinate, the Owner's Representative may (at his discretion) require the Contractor to install sod to cover such disturbed areas.
- CURBS & SIDEWALKS:
- Unless otherwise shown or indicated on the drawings, 6-inches nominal curb exposure used for design of all parking lot and street grades.
 - Where new curbing connects to existing curbing or is installed along existing streets or pavement, the gutter grade shall match the existing street grades so as to allow drainage from the street to the gutter and through any transitions. The Contractor shall notify the Owner's Representative in writing of any grade discrepancies or problems prior to curb placement.
 - Contractor shall construct all handicap access ramps in accordance with current ADA requirements.
 - Sidewalks shall be a minimum of 4-inches thick and standard residential driveways shall be a minimum of 6-inches thick. Commercial use driveways and alley approaches shall be minimum 8-inches thick. All curbs, sidewalks and driveways shall be constructed using 3300-psi concrete, and shall be cured with Type 1 or Type 10 clear curing compound. All sidewalks shall be ADA compliant.
 - Curb & sidewalk concrete shall be placed only during periods when it will not be damaged by rain (protect unhardened concrete from precipitation). Concrete shall not be placed on frozen base/rock. Do not begin concrete placement until temperature in the shade is a minimum of 35°F and rising, and stop placement if air temperature falls below 35°F. Protect concrete from freezing for a minimum of 5 days after placement per OSSC (ODOT/APWA) 00440.40.d & 00756.40 or the project specifications, whichever is more stringent.
 - Contraction joints shall be installed directly over any pipes that cross under the sidewalk, to control cracking. In general, cracks in new curbs or sidewalks (at locations other than contraction joints) are not acceptable, and cracked panels shall be removed & replaced unless otherwise approved by the Approving Agency and the design engineer.
 - All sidewalks shall be ADA compliant. Direction of sidewalk cross slope shall conform with the slope direction shown on the grading plan. Sidewalk cross slopes shall not exceed 1:67 (1.5%) nor be less than 1%. Longitudinal slope shall not exceed 1:20 (5%).
 - Where trench excavation requires removal of PCC curbs and/or sidewalks, the curbs and/or sidewalks shall be sawcut and removed at a tooled joint unless otherwise authorized in writing by the Approving Agency. The sawcut lines shown on the drawings are schematic and not intended to show the exact alignment of such cuts.
 - Unless otherwise shown on the drawings, areas along curbs and sidewalks shall be backfilled with approved topsoil, as well as being seeded and mulched (or hydroseeded).
- PIPED UTILITIES:
- All tapping of existing sanitary sewer, storm drain mains, and manholes must be done by City forces.
 - All tapping to be done by City of Salem forces. To schedule water/sewer/storm taps call (503) 588-6333. Taps are generally available within two business days.
 - The Contractor shall have appropriate equipment on site to produce a firm, smooth, undisturbed subgrade at the trench bottom, true to grade. The bottom of the trench excavation shall be smooth, free of loose materials or tooth grooves for the entire width of the trench prior to placing the granular bedding material.
 - All pipes shall be bedded with minimum 6-inches of 3/4"-0 crushed rock bedding and backfilled with compacted 3/4"-0 crushed rock in the pipe zone (crushed rock shall extend a minimum of 12-inches over the top of the pipe in all cases). Unless CDF or other backfill is shown or noted on the drawings, crushed rock trench backfill shall be used under all improved areas, including pavement, sidewalks, foundation slabs, buildings, etc.
 - Granular trench bedding and backfill shall conform to the requirements of OSSC (ODOT/APWA) 02630.10 (Dense Graded Base Aggregate), 3/4"-0. Unless otherwise shown on the drawings, compact granular backfill to 92% of the maximum dry density per AASHTO T-180 test method (Modified Proctor).
 - Contractor shall arrange to abandon existing sewer and water services not scheduled to remain in service in accordance with approving agency requirements.

- All piped utilities abandoned in place shall have all openings closed with concrete plugs with a minimum length equal to 2 times the diameter of the abandoned pipe.
- The end of all utility service lines shall be marked with a 2-x-4 painted white and wired to pipe stub. The pipe depth shall be written on the post in 2" block letters.
- All non-metallic water, sanitary and storm sewer piping shall have an electrically conductive insulated 12 gauge solid core copper tracer wire the full length of the installed pipe using blue wire for water and green wire for storm and sanitary piping. Tracer wire shall be extended up into all valve boxes, catch basins, manholes and lateral cleanout boxes. Tracer wire penetrations into manholes shall be within 18 inches of the rim elevation and adjacent to manhole steps. The tracer wire shall be tied to the top manhole step or otherwise supported to allow retrieval from the outside of the manhole. All tracer wire splices shall be made with waterproof splices or waterproof/corrosion resistant wire nuts.
- No trenches in sidewalks, roads, or driveways shall be left in an open condition overnight. All such trenches shall be closed before the end of each workday and normal traffic and pedestrian flows restored.
- Before mandrel testing, TV inspection or final acceptance of gravity pipelines, all trench compaction shall be completed and all sewers and storm drains flushed & cleaned to remove all mud, debris & foreign material from the pipelines, manholes and/or catch basins.
- Where future extensions are shown upstream of new manholes (sewer or storm), catch basins or junction boxes, pipe stubs (with gasketed caps) shall be installed at design grades to a point 2' minimum outside of the structure.

STORM DRAIN SYSTEM:

- Storm sewer pipe materials shall conform to the construction drawings and Approving Agency's requirements. Unless otherwise noted or shown on the drawings, storm sewer pipe materials with watertight joints shall conform to the attached "Storm Pipe Table". Contractor shall use uniform pipe material on each pipe run between structures unless otherwise directed or approved. Jointed HDPE pipe shall not be used for slopes exceeding ten percent (10%). All materials and workmanship for all private storm drains, including storm drains located within any building envelope, shall be installed in conformance with Uniform Plumbing Code requirements.
- Contractor shall designate the pipe material actually installed on the field record drawings and provide this information for inclusion on the as-built drawings.
- Catch basins and junction boxes shall be set square with buildings or with the edge of the parking lot or street wherein they lie. Storm drain inlet structures and paving shall be adjusted so water flows into the structure without ponding water.
- Unless otherwise approved by the Engineer, all storm drain connections shall be by manufactured tees or saddles.
- Unless otherwise shown on the drawings, all storm pipe inlets & outfalls shall be beveled flush to match the slope wherein they lie.
- Sweep (deflect) storm sewer pipe into catch basins and manholes as required. Maximum joint deflection shall not exceed 5 degrees or manufacturers recommendations, whichever is less.
- Unless otherwise shown or directed, install storm sewer pipe in accordance with manufacturer installation guidelines.
- After manhole channeling and prior to mandrel testing or final acceptance, flush and clean all sewers, and remove all foreign material from the mainlines, manholes and catch basins.
- Mandrel Testing. Contractor shall conduct deflection test of flexible storm sewer pipes by pulling on approved mandrel following trench compaction. The deflection of the mandrel shall be 95% of the initial pipe diameter. Test shall be conducted not more than 30 days after the trench backfilling and compaction has been completed.
- TV Inspection. Upon completion of all storm sewer construction, testing and repair, the Contractor shall conduct a color TV acceptance inspection of all mainlines in accordance with OSSC (ODOT/APWA) 445.74 to determine compliance with grade requirements of OSSC (ODOT/APWA) 445.40.b. The TV inspection shall be conducted by an approved technical service which is equipped to make audio-visual recordings of the TV inspections on DVD (VHS video tape acceptable only upon prior written approval by Public Works). Unless otherwise required by the agency with jurisdiction, a standard 1-inch diameter ball shall be suspended in front of the camera during the inspection to determine the depth of any standing water. Sufficient water to reveal low areas or reverse grades shall be discharged into the pipe immediately prior to initiation of the TV inspection. The DVD and written report shall be delivered to the Approving Agency.
- Prior to acceptance, the Owner's Representative may lamp storm lines upstream & downstream of structures to verify that the pipes are clean and there is no grout or concrete in the mainlines, and that there are no observable bellies in the line. When necessary, sufficient water to reveal low areas shall be discharged into the pipe by the Contractor prior to any such inspection by the Owner's Representative or the Approving Agency.

FRANCHISE & PRIVATE UTILITIES:

- Unless otherwise shown on the drawings or approved by jurisdiction having authority, all new franchise and private utilities (power, cable TV, telephone, gas, data, communication, control, alarms, etc.) shall be installed underground. Installation of such utilities or associated conduits in a common trench with public water, sanitary sewer, or storm sewer is prohibited.
- Contractor shall coordinate with gas, power, telephone, and cable TV Company for location of conduits in common trenches, as well as location or relocation of vaults, pedestals, etc. The Contractor shall be responsible for providing franchise utility companies adequate written notice of availability of the open trench (typically 10 days minimum), and reasonable access to the open trench. Unless otherwise approved in writing by the Approving Agency, all above-grade facilities shall be located in PUEs (where PUEs exist or will be granted by the development), and otherwise shall be placed in a location outside the proposed sidewalk location.
- Unless otherwise approved by the Approving Agency, installation of private utilities (including either franchise utilities or private water, sewer or storm services) in a common trench with or within 3 feet horizontally of and paralleling public water, sanitary sewer or storm drains is prohibited.
- Power, telephone and TV trenching and conduits shall be installed per utility company requirements with pull wire. Contractor shall verify with utility company for size, location and type of conduit before construction, and shall ensure that trenches are adequately prepared for installation per utility company requirements. All changes in direction of utility conduit runs shall have long radius steel bends.
- Contractor shall notify and coordinate with franchise utilities for removal or relocation of power poles, vaults, pedestals, manholes, etc. to avoid conflict with Public utility structures, fire hydrants, meters, sewer or storm laterals, etc.

STORM PIPE TABLE	
Cover Depth	6" – 18" Diameter
Less than 2' Cover	Class 50 ductile iron pipe with bell and spigot joints and rubber gasket.
2' to 2-1/2' Cover	Pipe specified for lesser cover depths –or– Class 3, ASTM C-14 non-reinforced concrete pipe with bell and spigot joints & rubber gaskets, ASTM 150 Type II cement. –or– PVC pipe conforming to AWWA C900 DR 18 (6"-12") or AWWA C-905 (14"-18") with bell and spigot joints and rubber gasket
2-1/2' to 15' Cover	Pipe specified for lesser cover depths –or– PVC pipe conforming to ASTM D-3034 PVC SDR 35 (6"-15") or ASTM F-679 PVC solid wall SDR 35 (18") with bell and spigot joints and rubber gasket. –or– HDPE (high density polyethylene) pipe conforming to AASHTO M-252, (8"-10") or AASHTO M-294 (12"-18"). For slopes less than 6% the pipe shall be ADS N-12 IB ST, Hancor Sure-Lok F477, or approved equal. For slopes greater than 6% the pipe shall be ADS N-12 IB WT, Hancor Blue Seal, or approved equal with watertight pressure testable fittings, –except– jointed HDPE (high density polyethylene) pipe referenced above not permitted for depth to invert greater than 12 feet.

REQUIRED TESTING AND FREQUENCY TABLE		Party Responsible for payment	
		Contractor	Others (see note 1)
Streets, Fire Lanes, Common Driveways, Parking Lots, Pads, Fills, etc.			
Subgrade	1 Test/4000 S.F./Lift (4 min), locations acceptable to approving agency (typically alternate sides of road or access aisles)	✓	See note 2 & note 3
Engineered Fills	1 Test/4000 S.F./Lift (4 min), locations acceptable to approving agency	✓	See note 2 & note 5
Base/rock	1 Test/4000 S.F./Lift (4 min), locations acceptable to approving agency (typically alternate sides of road or access aisles)	✓	See note 2 & note 3
Asphalt	1 Test/6000 S.F./LIFT (4 min), locations acceptable to AA (typ. alternate as above)	✓	See note 2
Piped Utilities, All			
Trench Backfill	1 Test/200 Foot Trench/Lift (4 min)	✓	See note 2
Trench AC Restoration	1 Test/300 Foot Trench (4 min)	✓	See note 2
Water			
Pressure Test	(to be witnessed by Owner's Representative or approving agency)	✓	See note 4
Bacterial Water Test	Per Oregon Health Division	✓	See note 2
Chlorine Residual Test	Per City Requirements	✓	
Sanitary Sewer			
Air Test	Per City or APWA Requirements, whichever is more stringent	✓	See note 4
Mandrel	95% of actual inside diameter	✓	See note 4
TV Inspection	All. Lines must be cleaned prior to TV work	✓	
Manhole	(1) Vacuum test per manhole, witnessed by Owner's Representative or approving agency	✓	See note 2
Pressure Test (force main)	Hydrostatic pressure test, witnessed by Owner's Representative or approving agency	✓	See note 4
Storm			
Mandrel	95% of actual inside diameter	✓	See note 4
TV Inspection	All. Lines must be cleaned prior to TV work	✓	
Concrete, Block, etc.			
Slump, Air & Cylinders for structural & reinforced concrete, equipment slabs, curbs, sidewalks & PCC pavements. Unless otherwise specified, one set of cylinders per 100 cubic yards (or portion thereof) of each class of concrete placed per day	Slump & air tests required on same load as cylinders.	✓	See note 2
Building permit inspection & Special Inspection for structural concrete, reinforced masonry, epoxy anchors, etc. as required by applicable State Building Codes.		✓	See note 6
Retaining Walls			
Building permit inspection and Special Inspection, as well as compaction testing on backfill, all in conformance with applicable State Building Code requirements		✓	See note 5 & note 6
Note 1: "Others" refers to Owner's authorized Representative or Approving Agency as applicable. Contractor responsible for scheduling testing. All testing must be completed prior to performing subsequent work.			
Note 2: Testing must be performed by an approved independent testing laboratory.			
Note 3: In addition to in-place density testing, the subgrade and base rock shall be proof-rolled with a loaded 10 yard dump truck provided by the Contractor. Base/rock proofroll shall take place immediately prior to (within 24 hours of) paving, and shall be witnessed by the Owner's authorized Representative or approving agency. Location and pattern of testing and proofroll to be as approved or directed by said Owner's authorized Representative or approving agency.			
Note 4: To be witnessed by the Owner's Representative or approving agency. The Contractor shall perform pretests prior to scheduling witnessed waterline or sanitary sewer pressure tests, or pipeline mandrel test.			
Note 5: The approved independent laboratory retained by the Contractor shall provide a certification (stamped by an engineer licensed in the State of Oregon) that the subgrade was prepared and all engineered fills were placed in accordance with the provisions of the construction drawings and the contract documents.			
Note 6: Regardless of who is responsible for payment, the Contractor is responsible for scheduling and coordinating any and all required inspections and Special Inspections as required by applicable building codes or jurisdictions having authority.			

VERIFY SCALE
BASE IS ONE INCH ON ORIGINAL DRAWING
IF NOT ONE INCH ON SCALES ACCURACLY



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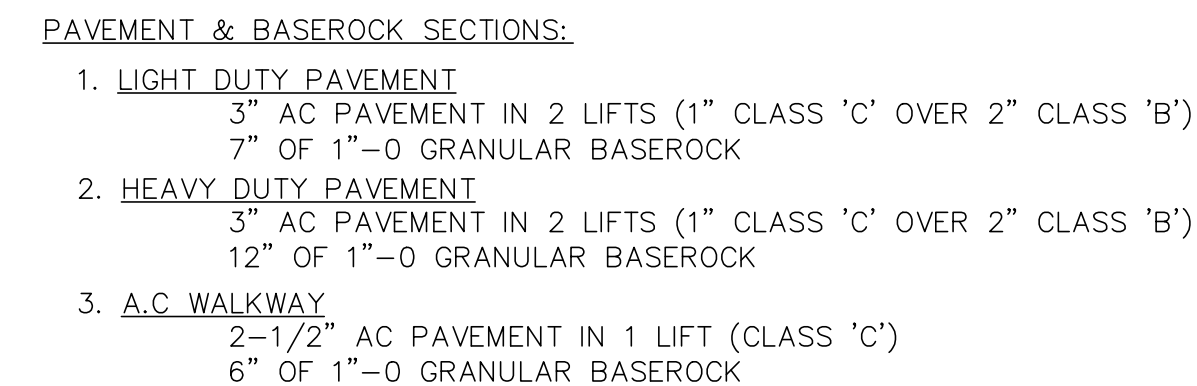
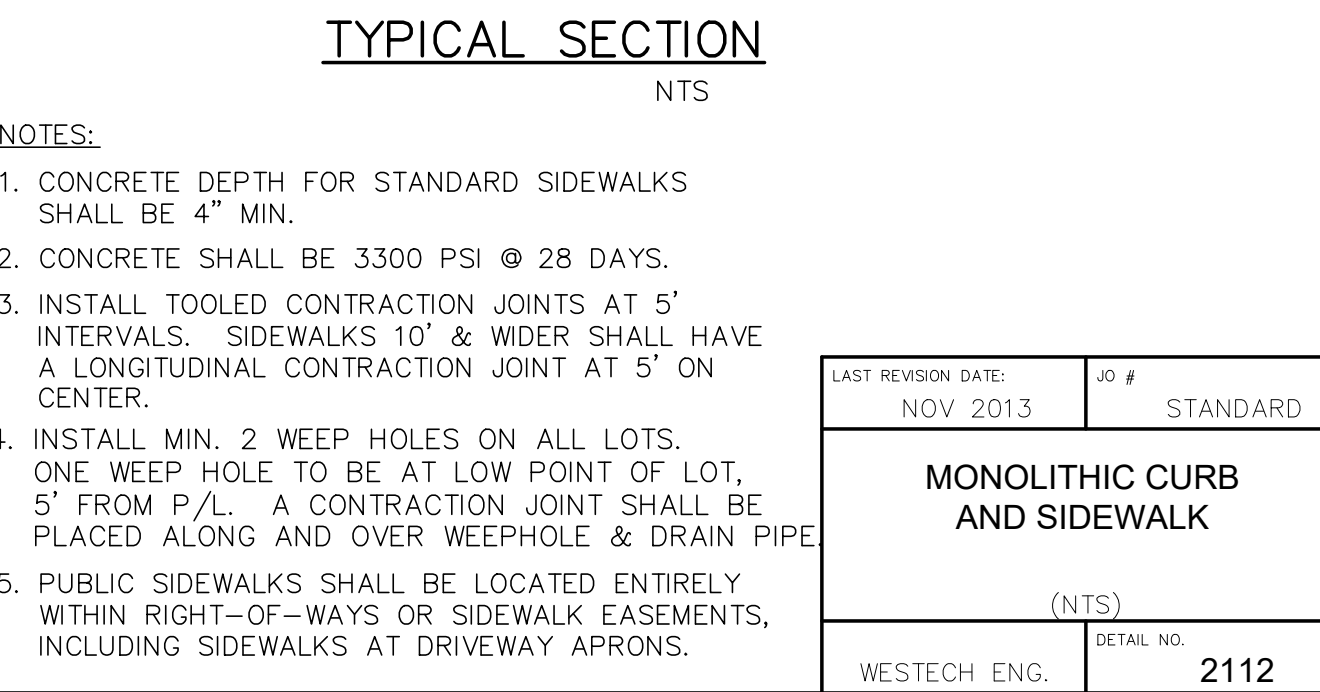
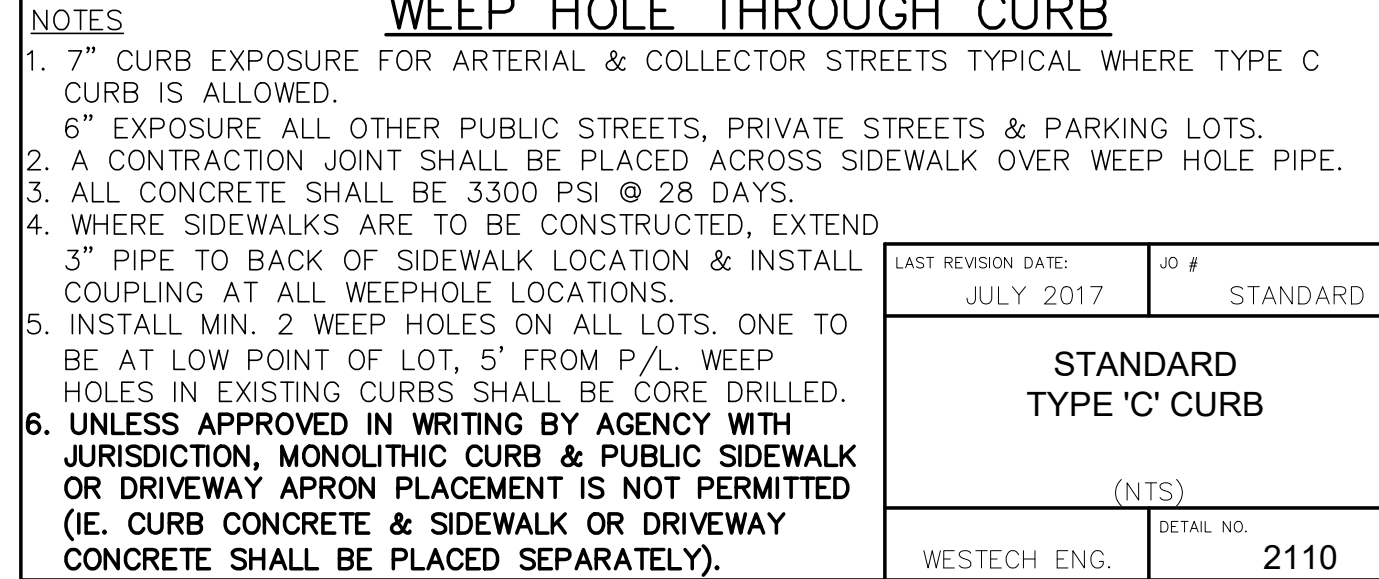
1035 COMMERCIAL ST – MIXED USE

DRAWING
C5.0
JOB NUMBER
3429.0000

CIVIL NOTES

DESCRIPTION
REVISIONS

DATE: 11/2022
NO. 1
DATE
BY



NOTES:

SEE GRADING PLAN FOR LOCATION OF LIGHT AND HEAVY DUTY PAVEMENT.

DESIGN SUBGRADE SHALL BE COMPACTED AND PROOF-ROLLED PRIOR TO PLACEMENT OF BASEROCK. IF SUBGRADE PASSES PROOF-ROLL BUT FAILS DENSITY TESTING, MIN. 4.5 OZ NON-WOVEN GEOTEXTILE FABRIC SHALL BE PLACED ON SUBGRADE PRIOR TO PLACEMENT OF BASEROCK. FAILURE OF PROOF-ROLL WILL REQUIRE OVEREXCAVATION.

IF SUBGRADE FAILS THE PROOF-ROLL, SUBGRADE SHALL BE OVEREXCAVATED TO UNDISTURBED SOIL AND BACKFILLED WITH BASEROCK OVER MIN. 8.0-OZ. NON-WOVEN FABRIC AS REQUIRED TO ALLOW COMPACTION OF UPPER (DESIGN) BASEROCK SECTION AND TO MAINTAIN STRUCTURAL INTEGRITY OF NATIVE SUBGRADE SOILS. TYPICAL MINIMUM OVEREXCAVATION REQUIRED IS 12-INCHES.

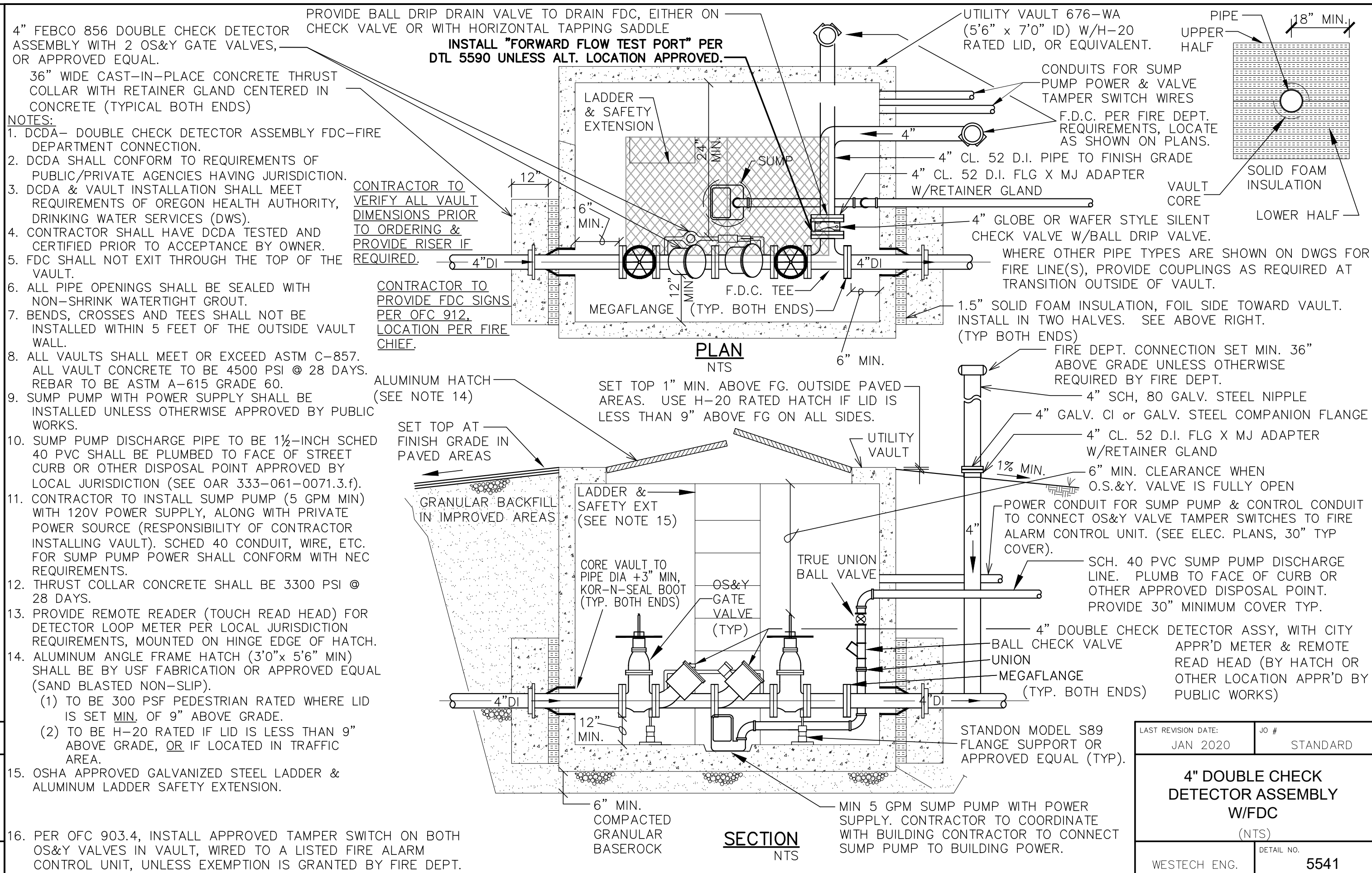
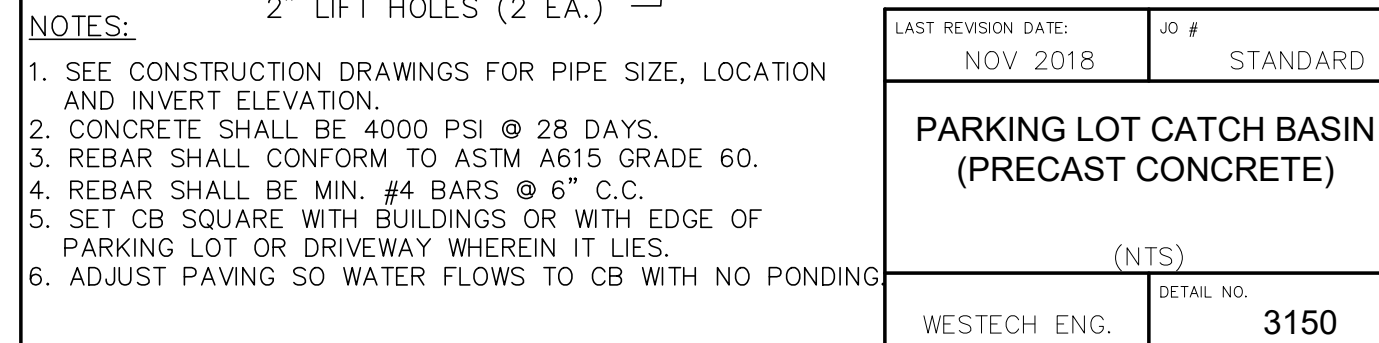
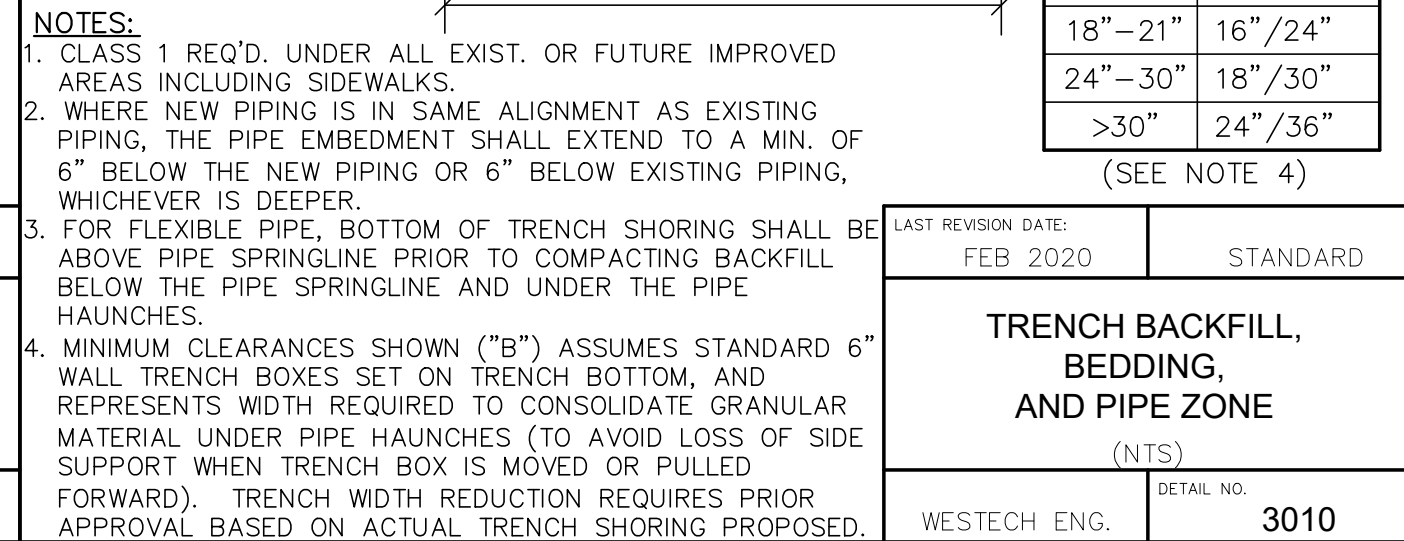
NO RUBBER TIED EQUIPMENT ALLOWED ON SUBGRADE FOLLOWING OVEREXCAVATION.

LAST REVISION DATE: JAN 2000	JO # X
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PAVEMENT SECTION

BASEROCK TO BE PROOFROLLED IMMEDIATELY PRIOR TO PAVING.

(NTS)



REVIEW

REVIEWS: 6/30/2024



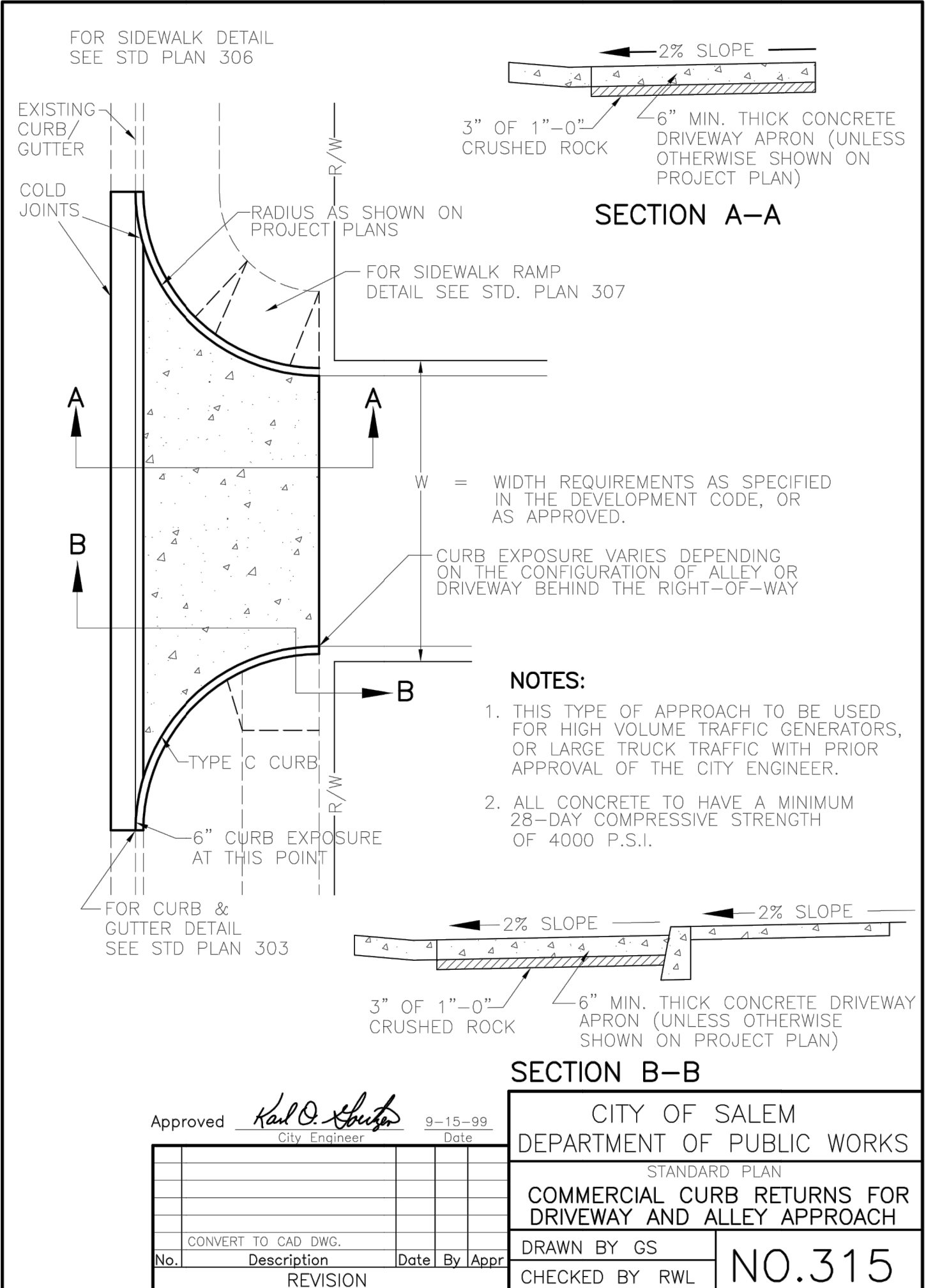
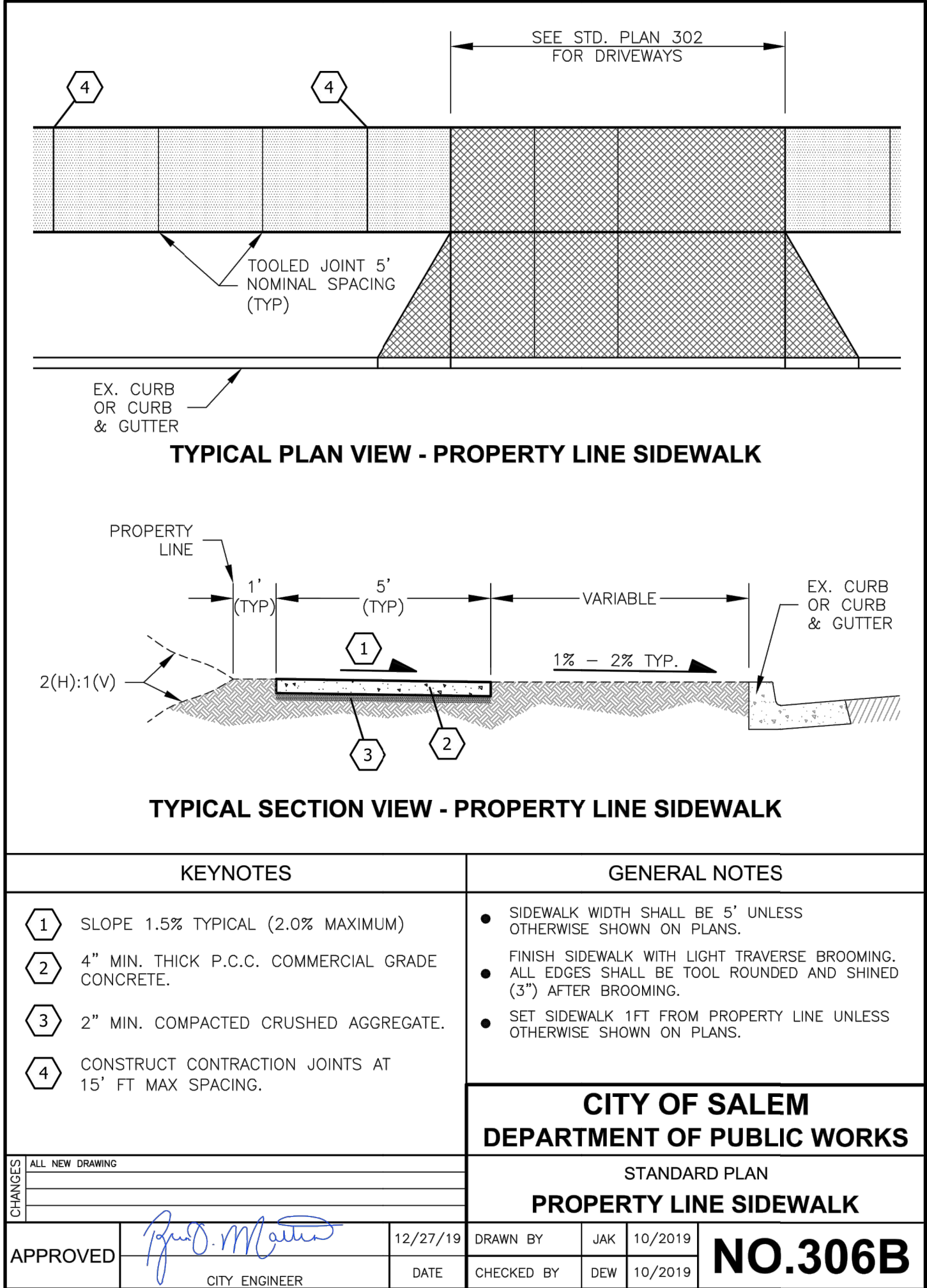
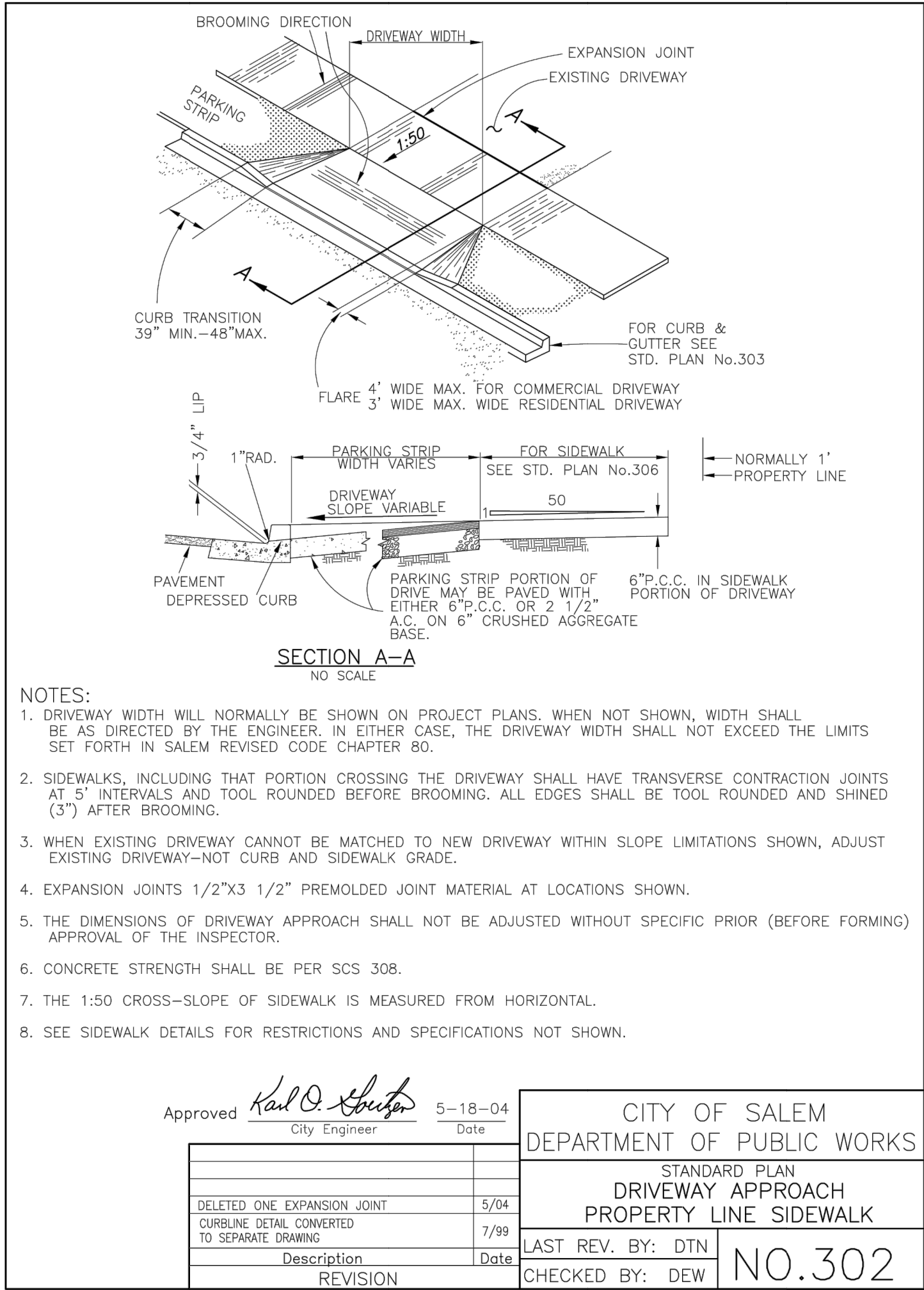
RENEWALS: 6/30/2024

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CB|TWO ARCHITECTS
1035 COMMERCIAL ST – MIXED USE
CONSTRUCTION DETAILS

3429.0000



CB TWO ARCHITECTS		1035 COMMERCIAL ST - MIXED USE		CITY DETAILS	
DRAWING		C6.1		JOB NUMBER	
3429.0000					

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING
IF NOT ONE INCH ON SCALES ACCORDINGLY

DSN. JW
DRN. JH
CKD. JW

DATE: 11/2022
NO. 1

DESCRIPTION
REVISIONS

BY

REGISTERED PROFESSIONAL ENGINEER
REVIEW
WILLIAM J. WILLIAM J.
NOV. 12, 2008
6/20/2024

WESTECH ENGINEERING, INC.
CONSULTING ENGINEERS AND PLANNERS

WE

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