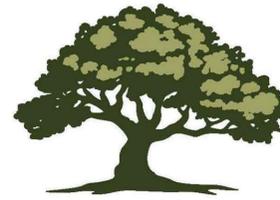


CITY OF SPRING VALLEY VILLAGE

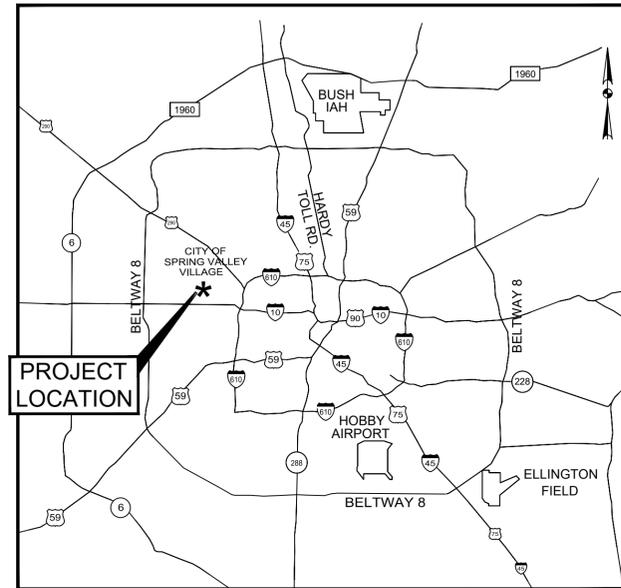
CONSTRUCTION PLANS FOR BRIGHTON PLACE RECONSTRUCTION

CITY OF SPRING VALLEY VILLAGE
HARRIS COUNTY, TEXAS
DECEMBER 2023

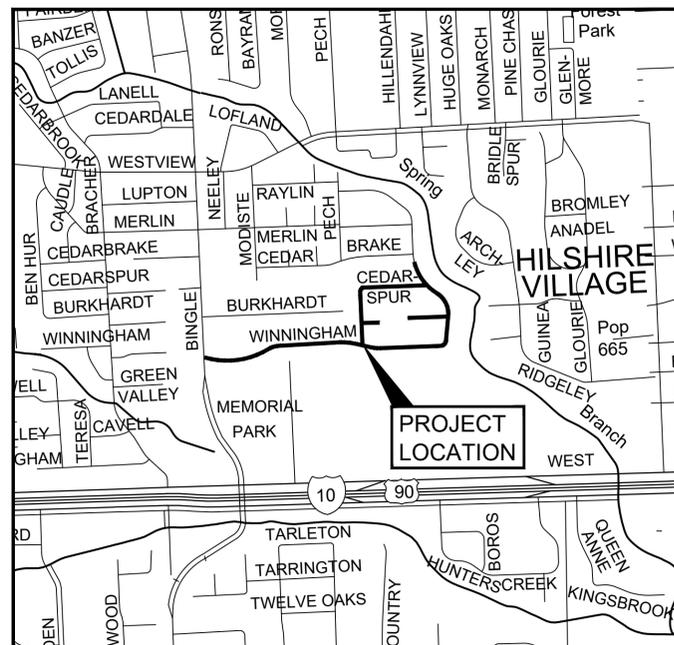


EST. 1955
SPRING VALLEY
VILLAGE

MAYOR - MARCUS VAJDOS
CITY COUNCIL - STEVE BASS
CITY COUNCIL - JOHN LIENBY
CITY COUNCIL - ALLEN CARPENTER
CITY COUNCIL - DAVID DOMINY
CITY COUNCIL - JOY McCORMACK



VICINITY MAP
N.T.S.



LOCATION MAP
KEY MAP #451W, 490D & 491A
N.T.S.

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FINAL SUBMITTAL

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GENERAL CONSTRUCTION NOTES:

- WARNING: THE CONSTRUCTION AREA CONTAINS ELECTRIC AND COMMUNICATION LINES. CONDUITS MAY CONTAIN HIGH VOLTAGE ELECTRICAL WIRING. SOME ELECTRICAL WIRING MAY BE BURIED BELOW GROUND WITHOUT CONDUITS. THE CONTRACTOR SHALL EXERCISE CAUTION.
- THE DRAWINGS SHOW AS MUCH INFORMATION AS CAN BE REASONABLY OBTAINED BY SURVEYS AND FROM CITY AND UTILITY RECORDS REGARDING THE LOCATION AND NATURE OF GAS LINES, STORM DRAINS, WATER LINES, ETC. HOWEVER, THE ACCURACY OR COMPLETENESS OF SUCH INFORMATION IS NOT GUARANTEED. THE CONTRACTOR SHALL CONTACT 811 PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING LOCATION OF ALL EXISTING UTILITIES PRIOR TO EXCAVATION. CONTRACTOR TO NOTIFY ENGINEER OF ANY CONFLICTS PRIOR TO CONTINUING CONSTRUCTION.
- CONTRACTOR SHALL NOTIFY THE CITY OF SPRING VALLEY VILLAGE AT (713) 465-8308 A MINIMUM OF FORTY-EIGHT (48) HOURS IN ADVANCE OF COMMENCING CONSTRUCTION.
- THE BIDDER SHALL VISIT THE SITE OF THE WORK AND EXAMINE LOCAL CONDITIONS TO BE ENCOUNTERED, IMPROVEMENTS TO BE PROTECTED AND CONDUCT OTHER RESEARCH NECESSARY TO ASSURE THAT THEY UNDERSTAND THE PROJECT THOROUGHLY AND ARE FULLY AWARE OF ALL CONDITIONS AND CONSTRAINTS WHICH MAY BE ENCOUNTERED DURING THE COURSE OF CONSTRUCTION.
- EQUIPMENT AND MATERIALS SHALL NOT BE STORED ON PUBLIC RIGHT-OF-WAY DURING THE COURSE OF CONSTRUCTION WITHOUT PRIOR APPROVAL BY AND COORDINATION WITH THE ENGINEER. ANY MATERIAL AND EQUIPMENT APPROVED BY THE ENGINEER FOR TEMPORARY PLACEMENT ALONG THE PUBLIC RIGHT-OF-WAY OR OUTSIDE THE EASEMENT AREAS SHALL BE ADEQUATELY BARRICADED FOR EACH DIRECTION OF TRAVEL.
- CONTRACTOR TO PROVIDE ACCESS TO RESIDENT DRIVEWAYS THROUGHOUT CONSTRUCTION.
- CONSTRUCTION TO COMMENCE ON ONE SIDE OF THE STREET AND MAINTAIN DIRECTION ON ONE SIDE UNTIL COMPLETE AND RESTORED TO MATCH EXISTING SURFACE CONDITIONS.
- IN THE EVENT OF DAMAGE TO UNDERGROUND FACILITIES, WHETHER SHOWN OR NOT ON THE DRAWINGS, THE CONTRACTOR SHALL MAKE OR PAY FOR THE NECESSARY REPAIRS TO PLACE THE FACILITIES BACK IN SERVICE AT NO INCREASE IN THE CONTRACT PRICE. ALL SUCH REPAIRS SHALL CONFORM TO THE REQUIREMENTS OF THE COMPANY OR AGENCY OPERATING THE FACILITY.
- EXISTING PAVEMENTS, CURBS, SIDEWALKS, AND DRIVEWAYS DAMAGED OR REMOVED DURING CONSTRUCTION SHALL BE REPLACED WITH NEW CONSTRUCTION FROM JOINT TO JOINT PER SPECIFICATIONS AND DETAILS IN ACCORDANCE WITH CITY OF SPRING VALLEY VILLAGE. AT NO ADDITIONAL COST TO OWNER.
- CONDITION OF THE ROAD AND/OR RIGHT-OF-WAY, UPON COMPLETION OF JOB, SHALL BE AS GOOD AS OR BETTER THAN THE CONDITION PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL COORDINATE WITH RESIDENTS WITHIN FORTY-EIGHT (48) HOURS OF ANY DRIVEWAY ACCESS RESTRICTIONS. CONTRACTOR SHALL WORK TO MINIMIZE INCONVENIENCE TO THE RESIDENTS.
- SURFACE RESTORATION AT THE END OF ALL CONSTRUCTION PROJECTS. THE CONTRACTOR SHALL RESTORE EXISTING FACILITIES (I.E. PROPERTY) EQUAL TO OR BETTER THAN EXISTING SITE CONDITIONS PRIOR TO CONSTRUCTION.
- THE LOADING AND UNLOADING OF ALL PIPE, MANHOLES AND OTHER ACCESSORIES SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDED PRACTICES AND SHALL AT ALL TIMES BE PERFORMED WITH CARE TO AVOID ANY DAMAGE TO THE MATERIAL. THE CONTRACTOR SHALL LOCATE AND PROVIDE THE NECESSARY STORAGE AREAS FOR MATERIALS AND EQUIPMENT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR SAFEGUARDING AND PROTECTING ALL MATERIAL AND EQUIPMENT STORED ON THE JOB SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE STORAGE OF MATERIALS IN A SAFE AND WORKMANLIKE MANNER TO PREVENT INJURIES, DURING AND AFTER WORKING HOURS, UNTIL PROJECT COMPLETION
- CONTRACTOR SHALL PROVIDE SHEETING, SHORING AND BRACING AS NECESSARY TO PROTECT WORKMEN AND EXISTING UTILITIES DURING ALL PHASES OF CONSTRUCTION, AS PER O.S.H.A. REQUIREMENTS.
- ALL FINISHING GRADES SHALL VARY UNIFORMLY BETWEEN FINISHED ELEVATIONS.
- PRIOR TO CONSTRUCTION, CONTRACTOR SHALL COORDINATE WITH RESIDENTS WHEN INTERRUPTING EXISTING SERVICES.
- CONTRACTOR SHALL PROVIDE PROPERTY OWNERS 2 WEEKS NOTICE PRIOR TO START OF CONSTRUCTION, TO ALLOW PROPERTY OWNERS TIME TO REMOVE PERSONAL PROPERTY WITHIN THE EXISTING R.O.W. LIMITS THAT MAY BE DAMAGED DURING CONSTRUCTION INCLUDING MAILBOXES, LANDSCAPING, HARDSCAPE, ETC.
- FOR ANY WATER OR SANITARY LINE REPAIR EMERGENCIES, CONTACT CITY OF SPRING VALLEY VILLAGE AT (713)465-8308.
- THERE WILL BE NO SEPARATE PAYMENT FOR WORK SHOWN ON THESE PLANS, UNLESS SPECIFICALLY ESTABLISHED IN THE BID PROPOSAL SECTION OF THE CONTRACT DOCUMENTS. INCLUDE COST OF THIS WORK IN THE CONTRACT UNIT PRICE FOR ITEMS OF WHICH THIS WORK IS A COMPONENT OR INCIDENTAL.
- EXISTING UTILITY INFORMATION SHOWN IS NOT GUARANTEED TO BE ACCURATE AND ALL INCLUSIVE. ALL EXISTING UTILITY LOCATIONS ARE APPROXIMATE AND SHOULD BE VERIFIED BY THE CONTRACTOR IN ADVANCE OF HIS CONSTRUCTION. ANY CONFLICT OR DISCREPANCY DISCOVERED MUST IMMEDIATELY BE BROUGHT TO THE ENGINEER'S ATTENTION.
- THE CONTRACTOR ON BEHALF OF THE OWNER, SHALL OBTAIN ALL CONSTRUCTION PERMITS PRIOR TO THE COMMENCEMENT OF WORK.
- THE WORK AREA SHALL BE BARRICADED AND ILLUMINATED DURING DARKNESS AND PERIODS OF INACTIVITY, WHEN IN AN AREA OF DIRECT PUBLIC ACCESS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE STORAGE OF MATERIAL AND EQUIPMENT IN A SAFE AND WORKMAN LIKE MANNER TO PREVENT INJURIES. DURING AND AFTER WORKING HOURS UNTIL PROJECT COMPLETION. THERE SHALL BE NO PAYMENT MADE TO THE CONTRACTOR FOR STORED MATERIAL.
- SWPPP BEST MANAGEMENT PRACTICES SHALL BE MAINTAINED BY CONTRACTOR THROUGHOUT CONSTRUCTION AS PART OF ORIGINAL UNIT BID PRICE. ALL PIPE AND REINFORCEMENT STEEL SHALL BE KEPT FREE OF DIRT AND OTHER DEBRIS. ANY DAMAGE TO THE COATING OF THE VARIOUS MATERIALS MUST BE REPAIRED.
- CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ADEQUATE AND POSITIVE DRAINAGE AT ALL TIMES DURING CONSTRUCTION OF PROPOSED FACILITIES. NATURAL GROUND ADJACENT TO UTILITY TRENCH EXCAVATION TO BE GRUBBED PRIOR TO PLACEMENT OF EXCESS TRENCH MATERIAL. (NO SEPARATE PAY)
- ALL UNSATISFACTORY AND/OR WASTE MATERIALS INCLUDING VEGETATION, ROOTS, CONCRETE AND DEBRIS SHALL BE DISPOSED OFFSITE BY THE CONTRACTOR. NO DIRECT PAYMENT WILL BE MADE, BUT SHALL BE CONSIDERED AS INCIDENTAL TO THE VARIOUS BID PROPOSAL ITEMS.
- ALL MANHOLES ARE TO BE CONSTRUCTED TO ALLOW FOR A MINIMUM OF 1 FOOT OF VERTICAL ADJUSTMENT.
- ALL TRENCH EXCAVATION, BEDDING AND BACKFILL SHALL BE IN CONFORMANCE WITH TCEQ AND THE CITY OF SPRING VALLEY VILLAGE STANDARD DETAILS - EXCAVATION AND BACKFILL FOR UTILITIES AND UTILITY BACKFILL SPECS, UNLESS OTHERWISE SHOWN IN PLANS.
- CONTRACTOR SHALL PROTECT ALL TREES ADJACENT TO WORK AREA. NO TREES SHALL BE REMOVED WITHOUT PERMISSION OF OWNER. SEE TREE PROTECTION PLAN FOR DETAILS.
- CONTRACTOR SHALL PROVIDE 6" MINIMUM CLEARANCE AT STORM SEWER, SANITARY SEWER AND WATER LINE CROSSINGS.
- EXCAVATE MUCK, ORGANIC MATERIAL AND UNSUITABLE SOIL PRIOR TO PLACING FILL. PLACE SUITABLE MATERIAL IN 8" MAXIMUM LOOSE LIFT AND COMPACT TO 95% STANDARD PROCTOR DENSITY.
- ALL BACKFILL SHALL BE PLACED 8" LIFTS AND COMPACTED TO 95% STANDARD PROCTOR DENSITY AND BE TESTED BY AN APPROVED TESTING LAB.

- CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE FLAGMEN, SIGNING, STRIPING AND WARNING DEVICES, ETC. DURING CONSTRUCTION BOTH DAY AND NIGHT IN ACCORDANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES."
- CONTRACTOR SHALL VERIFY LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES AND PAVEMENT BEFORE CONSTRUCTION. ANY VERIFICATIONS THAT ARE INCONSISTENT WITH THE PLANS NEED TO BE REPORTED TO THE ENGINEER BEFORE CONSTRUCTION BEGINS.
- LAWS TO BE OBSERVED. THE CONTRACTOR SHALL MAKE HIMSELF FAMILIAR WITH AND AT ALL TIME SHALL OBSERVE AND COMPLY WITH ALL FEDERAL, STATE, AND LOCAL LAWS, ORDINANCES, AND REGULATIONS WHICH IN ANY MANNER AFFECT THE CONDUCT OF THE WORK AND SHALL INDEMNIFY AND SAVE HARMLESS THE CITY AND ITS REPRESENTATIVES AGAINST ANY CLAIM ARISING FROM THE VIOLATION OF ANY SUCH LAW, ORDINANCE, OR REGULATIONS, WHETHER BY HIMSELF OR BY HIS EMPLOYEES.
- CONTRACTOR TO TERMINATE AND PLUG SPRINKLER SYSTEMS AT THE ROAD RIGHT-OF-WAY. PROPERTY OWNER RESPONSIBLE TO REPAIR IRRIGATION SYSTEM. CONTRACTOR TO BE PAID PER EACH LOT.
- EXISTING DRIVEWAYS WILL BE REPLACED WITH CONCRETE. CITY TO COORDINATE CUSTOM DRIVEWAYS WITH RESIDENTS PRIOR TO BIDDING. RESIDENTS WITH CUSTOM DRIVEWAYS, AS NOTED ON THE PLANS, ARE RESPONSIBLE FOR REPLACING THEIR DRIVEWAY. RESIDENTS WERE COMPENSATED BY THE CITY PRIOR TO BIDDING.
- GRADING WITHIN 10' OF EXISTING TREES SHALL BE COMPLETED BY HAND EXCAVATION. ALL WORK COMPLETED BY HAND EXCAVATION SHALL BE CONSIDERED INCIDENTAL THROUGHOUT THE LIMITS OF THE PROJECT.
- THE CITY WILL PROVIDE METAL CURB DRAIN OPENINGS FOR THE CONNECTION OF PROPOSED 4-INCH PVC CURB DRAINS. CONTRACTOR TO BE PAID FOR INSTALLATION OF CURB DRAIN PER DRAWING DETAILS.

STORM SEWER CONSTRUCTION NOTES:

- STORM SEWERS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF SPRING VALLEY VILLAGE GENERAL DESIGN AND CONSTRUCTION STANDARDS.
- STORM SEWERS SHALL BE INSTALLED, BEDDED AND BACKFILLED IN ACCORDANCE WITH CITY OF SPRING VALLEY VILLAGE DETAIL.
- ALL STORM SEWERS CONSTRUCTED IN SIDE LOT EASEMENTS SHALL BE R.C.P. (C-76 CLASS III) UNLESS SPECIFIED OTHERWISE AND SHALL BE BEDDED IN ACCORDANCE WITH THE CITY OF SPRING VALLEY VILLAGE DETAIL.
- ALL PROPOSED PIPE STUB-OUTS FROM MANHOLES OR INLETS ARE TO BE PLUGGED WITH 8" THICK BRICK WALLS UNLESS OTHERWISE NOTED.
- ALL STORM SEWER PIPES 18" AND LARGERS TO BE REINFORCED CONCRETE PIPE ASTM C76 CLASS III OR HIGH-PERFORMANCE POLYPROPYLENE INCLUDING INLET LEADS CROSSING UNDER EXISTING OR PROPOSED PAVEMENTS. ALL INLETS LEADS SHALL BE 18" REINFORCED CONCRETE PIPE OR LARGER, ALL STORM SEWER PIPE SHALL BE RUBBER GASKETED.

PAVING AND DRAINAGE NOTES:

- ALL CONCRETE PAVING SHALL BE IN ACCORDANCE WITH SPEC. SECTION 0275.1.
- ALL CONCRETE TO TEST 3500 P.S.I. AT 28 DAYS.
- ALL REINFORCING STEEL SHALL BE F=60 K.S.I.
- CONTRACTOR SHALL COORDINATE WITH RESIDENTS WITHIN 48 HOURS OF ANY DRIVEWAY ACCESS RESTRICTIONS. CONTRACTOR SHALL WORK TO MINIMIZE INCONVENIENCE TO THE RESIDENTS.

CENTERPOINT ENERGY:

CAUTION: UNDERGROUND GAS FACILITIES

THE CONTRACTOR SHALL CONTACT THE UTILITY COORDINATING COMMITTEE AT 1-800-545-6005 OR 811 A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION TO HAVE MAIN AND SERVICE LINES FIELD LOCATED.

- WHEN CENTERPOINT ENERGY PIPE LINE MARKINGS ARE NOT VISIBLE, CALL (713) 207-5463 OR (713) 945-8037 (7:00 A.M. TO 4:30 P.M.) FOR STATUS OF LINE LOCATION REQUEST BEFORE EXCAVATION BEGINS.
- WHEN EXCAVATING WITHIN EIGHTEEN INCHES (18") OF THE INDICATED LOCATION OF CENTERPOINT ENERGY FACILITIES, ALL EXCAVATION MUST BE ACCOMPLISHED USING NON-MECHANIZED EXCAVATION PROCEDURES.
- WHEN CENTERPOINT ENERGY FACILITIES ARE EXPOSED, SUFFICIENT SUPPORT MUST BE PROVIDED TO THE FACILITIES TO PREVENT EXCESSIVE STRESS ON THE PIPING.
- FOR EMERGENCIES REGARDING GAS LINES CALL (713) 659-3552 OR (713) 207-4200.

THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY DAMAGES CAUSED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE THESE UNDERGROUND FACILITIES.

ACTIVITIES ON/OR ACROSS CENTERPOINT ENERGY FEE OR EASEMENT PROPERTY

NO APPROVAL TO USE, CROSS OR OCCUPY CENTERPOINT FEE OR EASEMENT PROPERTY IS GIVEN. IF YOU NEED TO USE CENTERPOINT PROPERTY, PLEASE CONTACT OUR SURVEYING & RIGHT OF WAY DIVISION AT (713) 207-6348 OR (713) 207-5769.

AT&T TEXAS/SWBT FACILITIES:

- THE LOCATIONS OF AT&T TEXAS/SWBT FACILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THIS FAILURE TO EXACTLY LOCATE AND PRESERVE THESE UNDERGROUND UTILITIES.
- THE CONTRACTOR SHALL CALL 1-800-344-8377 (TEXAS 811) A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION TO HAVE UNDERGROUND LINES FIELD LOCATED.
- WHEN EXCAVATING WITHIN EIGHTEEN INCHES (18") OF THE INDICATED LOCATION OF AT&T TEXAS/SWBT FACILITIES, ALL EXCAVATIONS MUST BE ACCOMPLISHED USING NON-MECHANIZED EXCAVATION PROCEDURES. WHEN BORING, THE CONTRACTOR SHALL EXPOSE THE AT&T TEXAS/SWBT FACILITIES.
- WHEN AT&T TEXAS/SWBT FACILITIES ARE EXPOSED, THE CONTRACTOR WILL PROVIDE SUPPORT TO PREVENT DAMAGE TO THE CONDUIT DUCTS OR CABLES. WHEN EXCAVATING NEAR TELEPHONE POLES THE CONTRACTOR SHALL BRACE THE POLE FOR SUPPORT.
- THE PRESENCE OR ABSENCE OF AT&T TEXAS/SWBT UNDERGROUND CONDUIT FACILITIES OR BURIED CABLE FACILITIES SHOWN ON THESE PLANS DOES NOT MEAN THAT THERE ARE NO DIRECT BURIED CABLES OR OTHER CABLES IN CONDUIT IN THE AREA.
- PLEASE CONTACT THE AT&T TEXAS DAMAGE PREVENTION MANAGER ROOSEVELT LEE JR. AT (713) 412-3990 OR E-MAIL HIM AT RL7259@ATT.COM IF CABLE LOCATE REQUESTS ARE NOT COMPLETED FOR OUR AT&T TEXAS/SWBT FACILITIES.

SPRING VALLEY VILLAGE GENERAL NOTES:

WASTEWATER COLLECTION: ALL SEWER COLLECTION ITEMS SHALL BE DESIGNED AND INSTALLED ACCORDING TO ADOPTED PLUMBING CODES AND THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY STANDARDS.

MANHOLES: ALL MANHOLES SHALL BE PRECAST CONCRETE UNLESS APPROVED BY A PROFESSIONAL ENGINEER WHO SUBMITS A "CAST IN PLACE" MANHOLE DESIGN FOR REVIEW AND IS APPROVED BY THE CITY. ALL PRECAST MANHOLES SHALL INCORPORATE A "BOOT" TYPE CONNECTOR FOR SEWER DIAMETERS UP TO TWENTY-FOUR INCHES (24"). FOR SEWER DIAMETERS GREATER THAN TWENTY-FOUR INCHES (24"), UTILIZE EITHER THE "BOOT" TYPE CONNECTOR (IF AVAILABLE) OR AN INTEGRAL GASKET. ALL PRECAST MANHOLES SHALL CONFORM TO THE LATEST AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM) REQUIREMENTS. MANHOLES SHALL BE COATED WITH CORROSION RESISTANT EPOXY COATING APPROVED BY THE CITY. FOR ALL PUBLIC SEWERS, MANHOLES SHALL BE PLACED AT ALL CHANGES IN ALIGNMENT, CHANGES IN GRADE, JUNCTION POINTS, AND EITHER AT STREET, ALLEY, OR EASEMENT INTERSECTIONS AS THE DESIGN MAY REQUIRE. THE MAX SPACING BETWEEN MANHOLES IS FOUR-HUNDRED FEET (400') UNLESS OTHERWISE APPROVED BY THE CITY. THE MINIMUM MANHOLE DEPTH SHALL BE FOUR FEET (4'). MANHOLES SHALL BE PLACED AT ALL DEAD-END MAINS AND LATERALS UNLESS OTHERWISE APPROVED BY THE CITY. WALL PENETRATION SHALL BE CORED AND SHALL USE THE APPROPRIATE BOOTS AND APPROVED "GROUT" FOR SEALING AS APPROVED BY THE CITY ENGINEER. FOR AN EXISTING MANHOLE THAT IS CORED, THE COATING OF THE MANHOLE WILL NEED TO BE REPAIRED OF LINED.

MANHOLE LIDS: UTILIZE MANHOLE LIDS WITH THE APPROVED CITY OF SPRING VALLEY LOGO ON ALL MANHOLES. DETAIL: WW-8 TO WW-11.

MANHOLE WITHIN THE 100 YEAR FLOODPLAIN: MANHOLES LOCATED WITHIN THE 100 YEAR FLOODPLAIN OR IN AREAS OF HIGH GROUND WATER SHALL BE WATERPROOFED BY WRAPPING THE INDIVIDUAL JOINTS WITH CONWRAP, CONSEAL, OR APPROVED EQUAL. WATERPROOFING MEASURES SHALL APPROVED BY THE CITY OF PRIOR TO BACKFILL. MANHOLES SHOWING SIGNS OF INFILTRATION SHALL BE EXCAVATED AND REPAIRED, TO THE SATISFACTION OF THE CITY, PRIOR TO ACCEPTANCE BY THE CITY. MANHOLES LOCATED WITHIN THE 100 YEAR FLOODPLAIN SHALL BE INSTALLED WITH RIM ELEVATIONS NOT LESS THAN TWO FEET (2') ABOVE THE FLOODPLAIN AT THAT LOCATION. MANHOLES LOCATED WITHIN THE ONE HUNDRED (100) YEAR FLOODPLAIN MAY ALSO REQUIRE A SEALABLE MANHOLE COVER OR AN INFILTRATION CAP (DETAIL WW-5).

STREETS:

RESIDENTIAL STREET WIDTH: ALL RESIDENTIAL STREET SHALL HAVE A WIDTH OF TWENTY-EIGHT (28") FEET MAY OCCUR IN LIMITED SITUATIONS (I.E LARGE TREES IN ROW), AND REQUIRED WRITTEN APPROVAL FROM THE CITY PRIOR TO AN PAVING.

PAVEMENT TYPE: ALL STREETS SHALL BE CONSTRUCTED IN CONCRETE.

STREET CURB TYPE: SIX-INCH (6") MONUMENT CURBS SHALL BE USED ALL COLLECTOR STREETS AND FOUR-INCH (4") ROLLOVER CURBS SHALL BE USED ON ALL LOCAL/RESIDENTIAL STREETS. IN CONJUNCTION WITH THESE STREET CURB TYPES, A GALVANIZED FABRICATED CURB CONNECTION SHALL BE USED IN COMPLIANCE WITH THE CITY'S DRAINAGE CRITERIA MANUAL.

SIDEWALKS: THE CONSTRUCTION OF SIDEWALKS WILL BE LIMITED TO COLLECTOR AND THOROUGH STREETS.

COMPLICATION WITH RIGHT-OF-WAY REGULATIONS: ANY AND ALL WORK PERFORMED WITHIN THE CITY'S RIGHT-OF-WAY, INCLUDING CUTTING OR EXCAVATING ANY PUBLIC STREET, SHALL COMPLY WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS. THE CITY HAS ADOPTED RIGHT-OF-WAY REGULATIONS THAT MAY BE FOUND ON THE CITY'S WEBSITE IN THE CODE OF ORDINANCES. THESE REGULATIONS INCLUDE A REQUIREMENT TO OBTAIN A RIGHT-OF-WAY PERMIT FROM THE CITY FOR NON-CITY PROJECTS PRIOR TO PERFORMING ANY WORK WITHIN THE CITY'S RIGHT-OF-WAY. FAILURE TO COMPLY WITH APPLICABLE RIGHT-OF-WAY REGULATIONS WILL RESULT IN ENFORCEMENT ACTION BY THE CITY.

BARRICADES REQUIRED: IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR PERFORMING THE WORK ALONG A STREET TO INSTALL BARRICADES, FLAGS, AND OTHER SAFETY MEASURES NECESSARY DURING THE TIME OF CONSTRUCTION AND UNTIL ALL HAZARDS HAVE BEEN CORRECTED AFTER THE COMPLETION OF THE WORK. WHETHER THE PROJECT IS DESIGNED BY AN ENGINEER OR NOT, A TRAFFIC PLAN MUST BE SUBMITTED TO AND APPROVED BY THE CITY.

BACKFILLING EXCAVATIONS OUTSIDE THE PAVEMENT: ALL EXCAVATIONS IN THE STREET RIGHT-OF-WAY SHALL BE REPLACED BY TAMPING, BACKFILLING WITH SELECT FILL, SAND, GRAVEL, OR OTHER METHODS APPROVED BY THE CITY ENGINEER OR THE CITY. BACKFILL SHALL BE COMPACTED ACCORDING TO ENGINEERING PLANS AND SPECIFICATIONS. THE CONTRACTOR SHALL RESTORE ANY AREAS DAMAGED OR DISTURBED TO ORIGINAL BY BLOCKING SODDING.

CONCRETE PAVEMENT RESTORATION: IF CONCRETE PAVEMENT HAS TO BE RESTORED AND THE WORK CANNOT BE AVOIDED, ALL EXCAVATIONS OR REMOVAL OF ANY CONCRETE PAVEMENT IN THE STREET RIGHT-OF-WAY SHALL BE REPLACED AS FOLLOWS:

- REPLACE THE ENTIRE STREET OR SIDEWALK PANEL WIDTH, LENGTH, AND DEPTH TO THE NEAREST CONSTRUCTION OR EXPANSION JOINT;
- REPLACE THE CONCRETE PAVEMENT TO EXISTING DEPTH OR ACCORDING TO ENGINEERING SPECIFICATIONS APPROVED BY THE CITY UTILIZING DOWELS AND REBAR SPECIFIED.

NO.	DATE	REVISIONS



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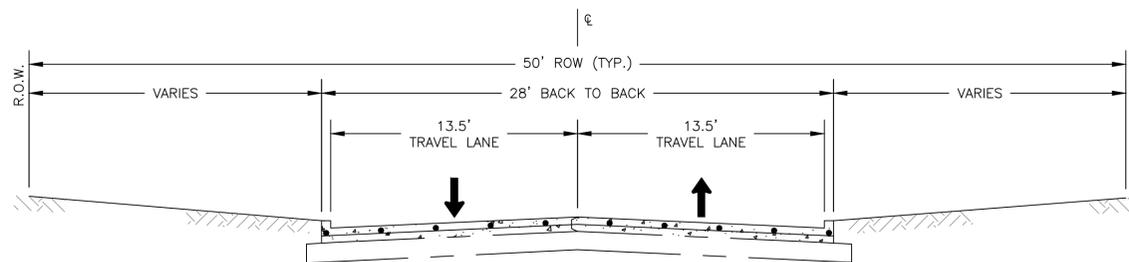
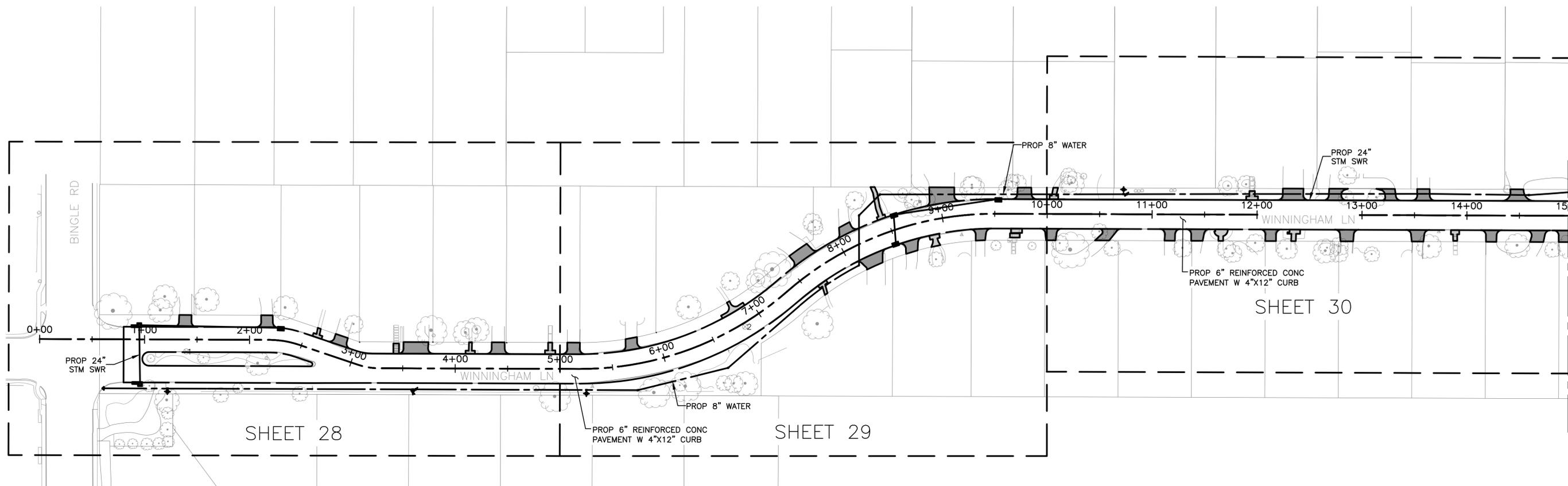
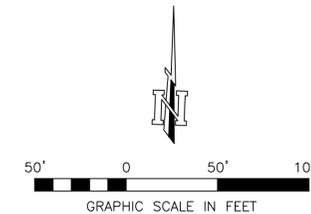
CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

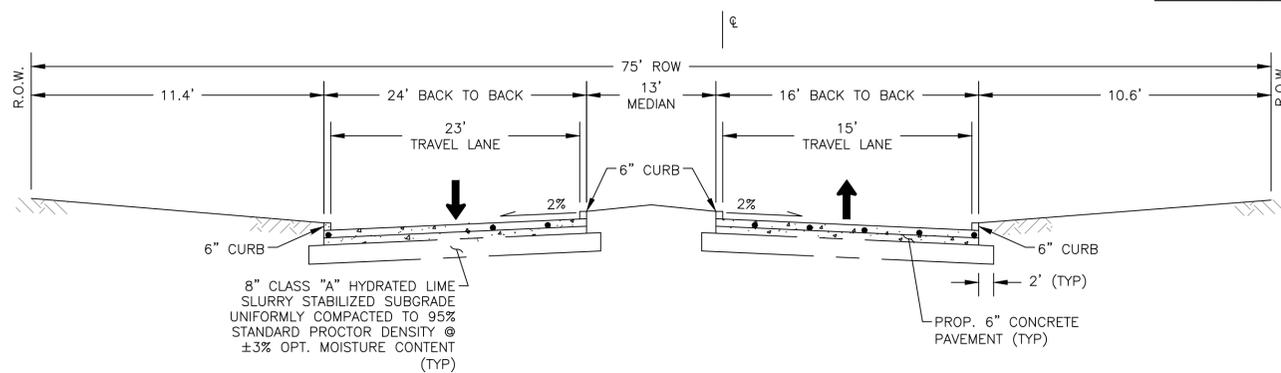
GENERAL NOTES

SUBMITTED: 12/04/23	DESIGNED BY: JMS
SCALE: N/A	DRAWN BY: AA
DATE: 12/04/23	SHEET No.: 2 OF 101
SURVEY BY: CFA	DWG. No:
F B No.: -	

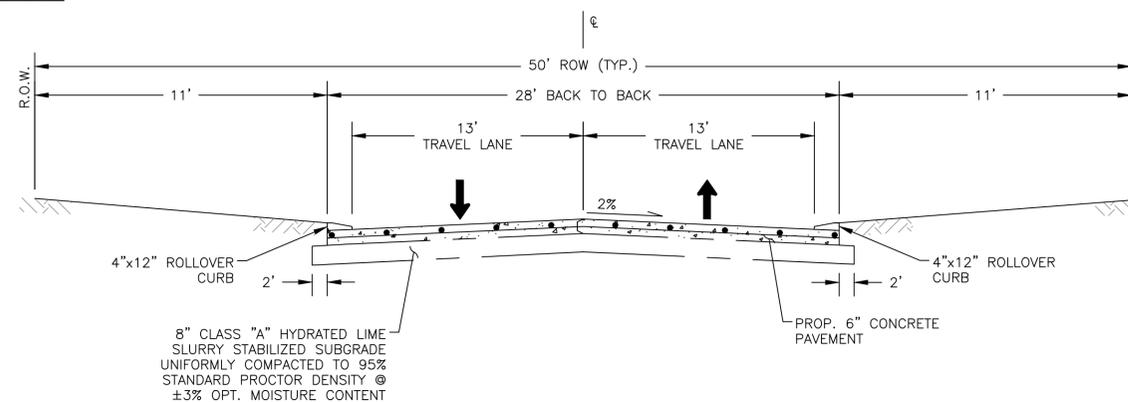
- NOTES:
- CONTRACTOR SHALL NOTIFY ADJACENT RESIDENTS IN WRITING 48-HOURS BEFORE COMMENCING CONSTRUCTION, BEFORE MAKING CHANGES TO TRAFFIC PHASING AND BEFORE ANY DRIVEWAY RESTRICTIONS. CONTRACTOR TO NOTIFY RESIDENTS USING DOOR HANGERS, LETTERS, ETC. COORDINATION WITH RESIDENTS IS INCIDENTAL TO THE PROJECT.
 - ALL DRIVEWAYS AND WALKWAYS WILL BE REPLACED WITH CONCRETE. SEE DRIVEWAY AND WALKWAY TABLE FOR DETAILS SHEET 25-27. SOME RESIDENTS HAVE ELECTED TO REPLACE THEIR DRIVEWAY OR WALKWAY INDEPENDENTLY.
 - CONTRACTOR MUST FOLLOW PHASING PLAN, SEE SHEET 49-54. MAXIMUM 1,000-FT MAY BE DISTURBED AT A TIME. CITY MUST ACCEPT FINAL COMPLETION OF A PHASE BEFORE THE NEXT PHASE MAY BE STARTED. SEE TRAFFIC CONTROL SHEETS FOR MORE DETAILS.
 - PROJECT INCLUDES INSTALLATION OF NEW WATER LINE, ABANDONMENT OF OLD WATER LINE, NEW SERVICE LINES AND NEW FIRE HYDRANTS. EXISTING WATER METER WILL REMAIN.



EXISTING TYPICAL CROSS-SECTION
CONCRETE PAVEMENT



PROPOSED BOULEVARD CROSS-SECTION
CONCRETE PAVEMENT
WINNINGHAM LN STA 0+00 TO STA 3+27



PROPOSED TYPICAL CROSS-SECTION
CONCRETE PAVEMENT

NO.	DATE	REVISIONS



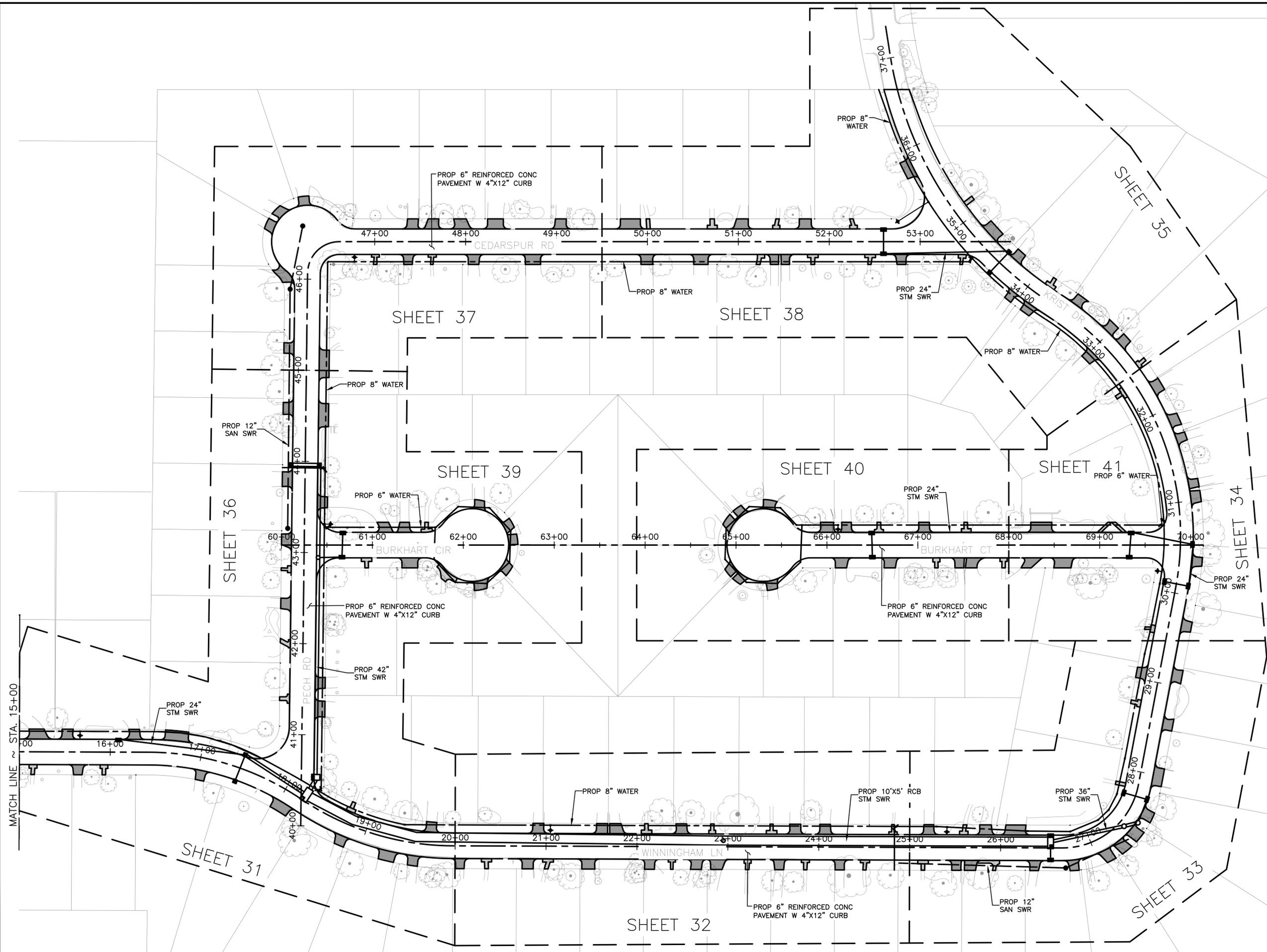
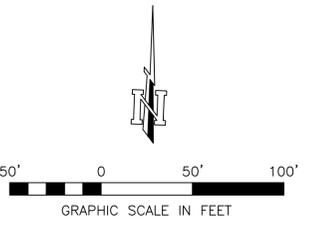
CobbFendley
 TBPELS Engineering Firm No. 274
 Land Surveying Firm No. 10046700
 13430 Northwest Freeway, Suite 1100
 Houston, Texas 77040
 713.462.3242 | fax 713.462.3262
 www.cobbfendley.com

CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

OVERALL LAYOUT
(1 OF 2)

SUBMITTED: 12/04/23	DESIGNED BY: JMS
SCALE: 1"=50'	DRAWN BY: JS
DATE: 12/04/23	SHEET No.: 3 OF 101
SURVEY BY: CFA	DWG. No.:
F B No.: -	



NO.	DATE	REVISIONS



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CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

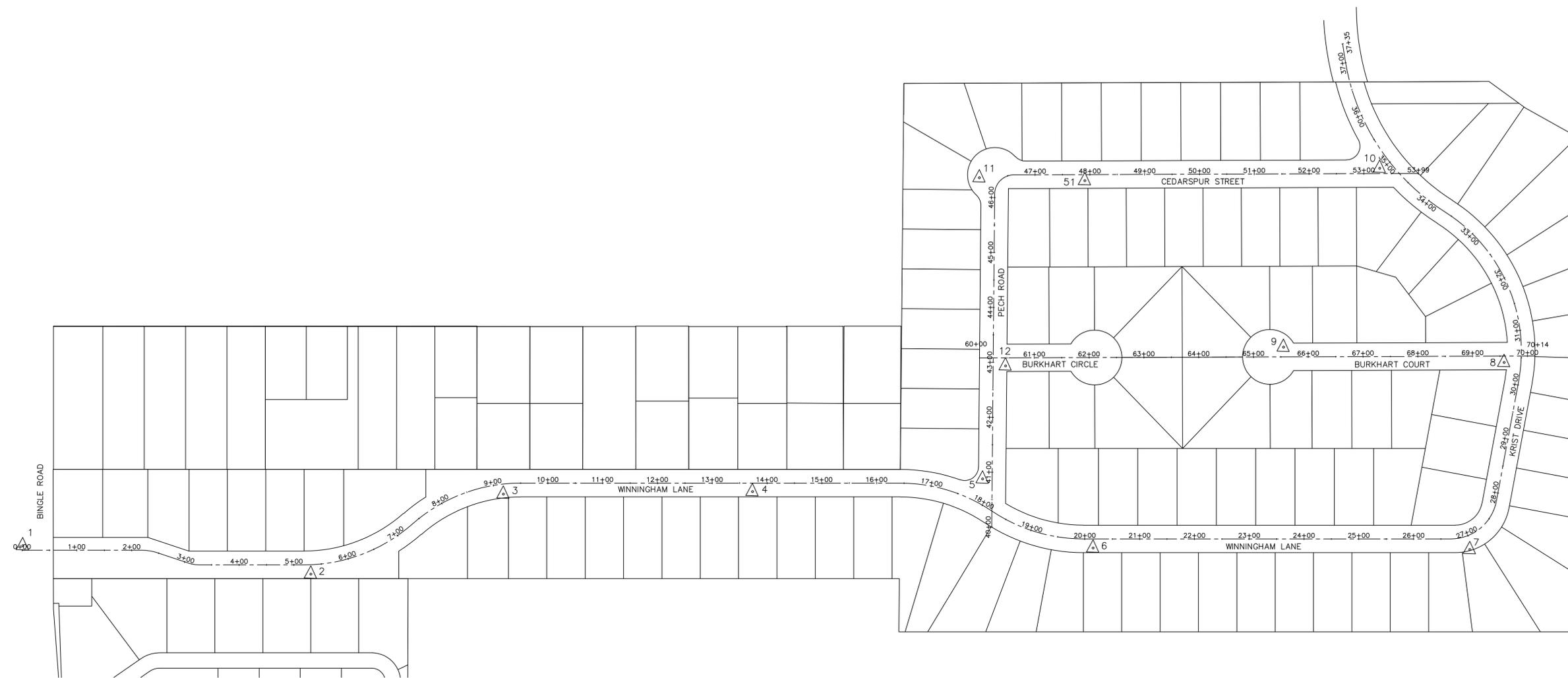
OVERALL LAYOUT
(2 OF 2)

SUBMITTED: 12/04/23	DESIGNED BY: JMS
SCALE: 1"=50'	DRAWN BY: JS
DATE: 12/04/23	SHEET No.: 4 OF 101
SURVEY BY: CFA	DWG. No.:
F B No.: -	

D:\PROJECTS\2022\12056_CITY_OF_SPRING_VALLEY_VILLAGE\01_BRIGHTON_PLACE_RECONSTRUCTION\400_CAD\412_MUN\412_SHEETS\2212-056_CN_OVR_LAY.DWG



NOT TO SCALE



TO ARRANGE FOR LINES TO BE TURNED OFF OR MOVED, CALL CENTERPOINT ENERGY AT 713-207-2222.

NOTICE:
 FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS VERIFICATION DOES NOT FULFILL YOUR OBLIGATION TO CALL 811.

VERIFICATION OF PRIVATE UTILITY LINES

DATE _____

CENTERPOINT ENERGY/NATURAL GAS FACILITIES VERIFICATION ONLY.
 (THIS SIGNATURE VERIFIES THAT YOU HAVE SHOWN CNP NATURAL GAS LINES CORRECTLY. NOT TO BE USED FOR CONFLICT VERIFICATION.) (GAS SERVICE LINES ARE NOT SHOWN.)
 SIGNATURE VALID FOR SIX MONTHS.

DATE _____

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DATE _____

AT&T TEXAS/SWBT UTILITY LINES SHOWN
 APPROVED FOR AT&T TEXAS/SWBT UNDERGROUND CONDUIT FACILITIES ONLY.
 SIGNATURE VALID FOR ONE YEAR.

NO.	DATE	REVISIONS



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CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

SURVEY CONTROL (1 OF 2)

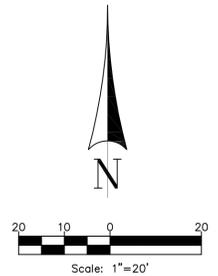
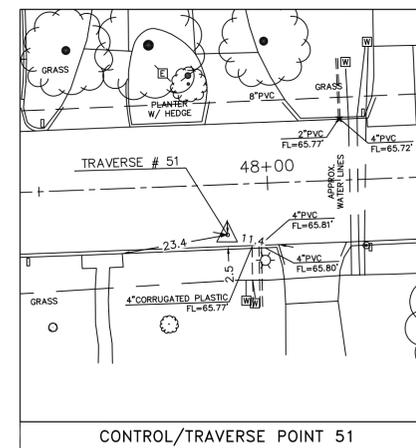
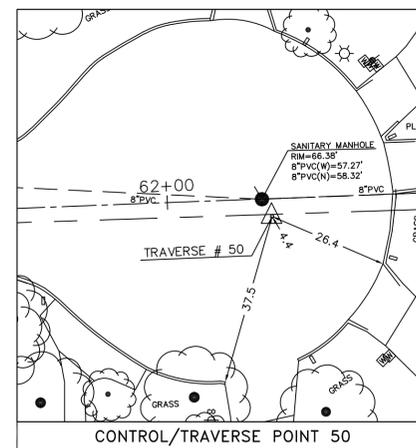
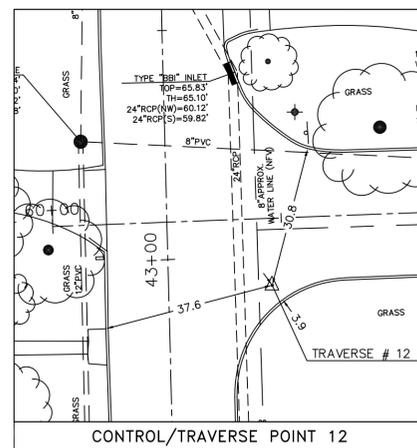
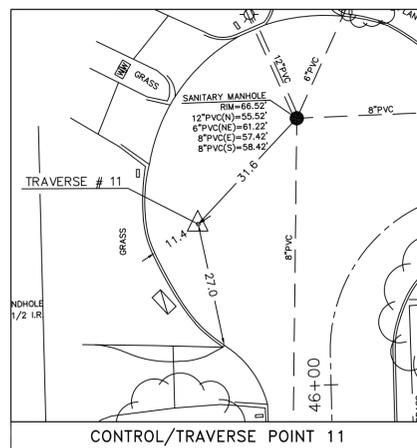
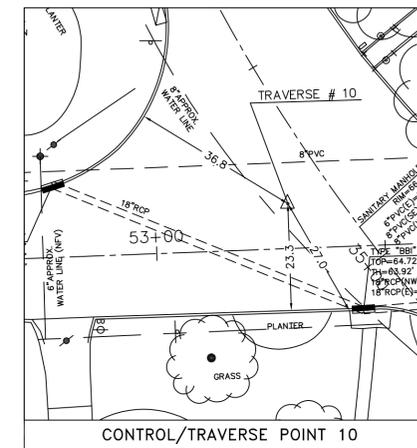
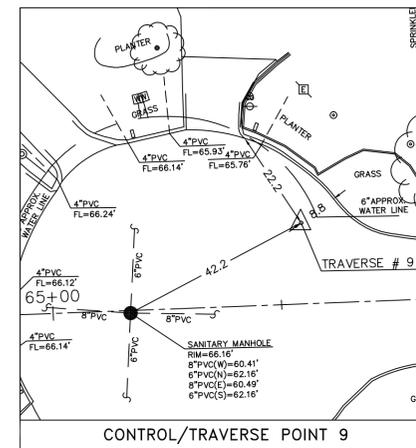
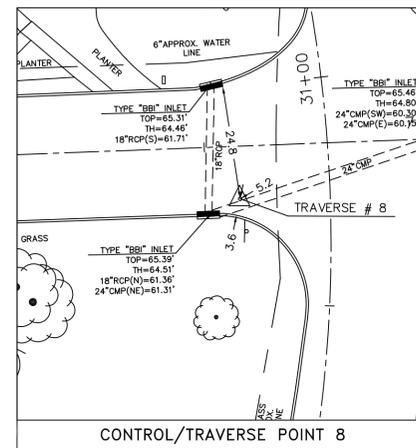
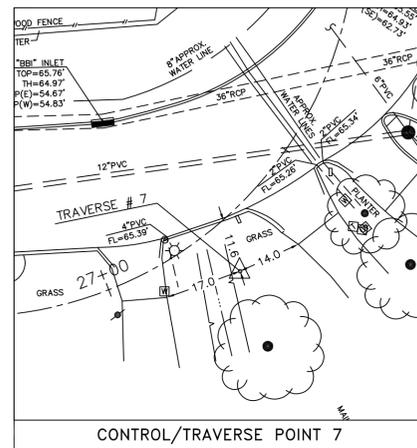
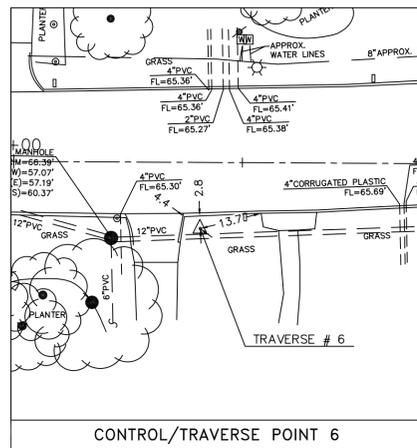
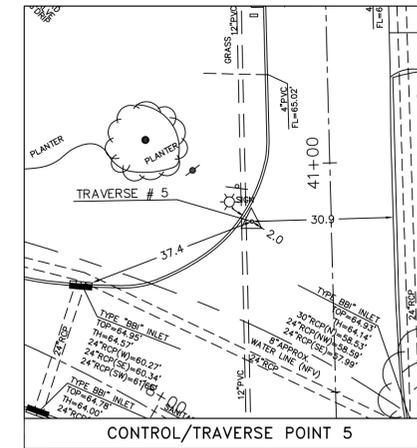
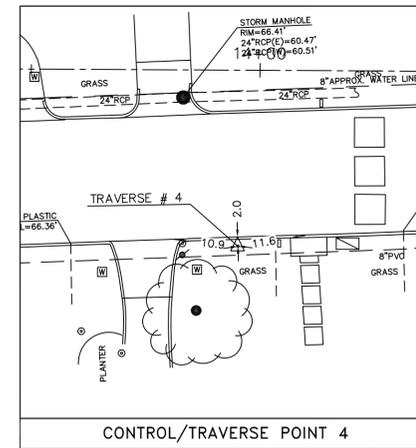
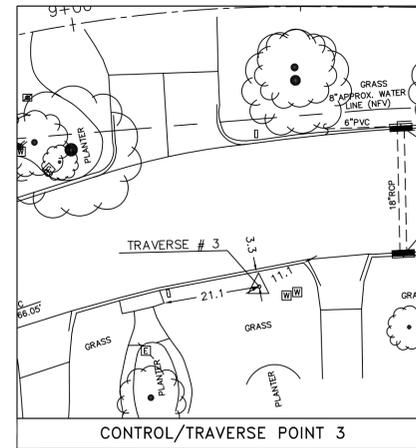
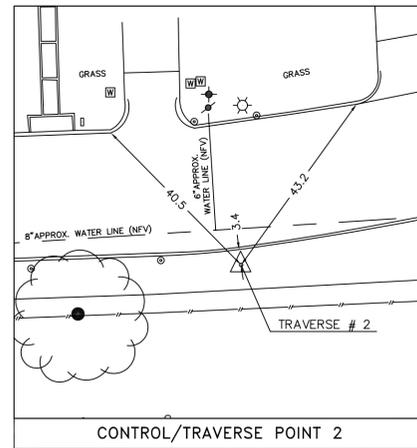
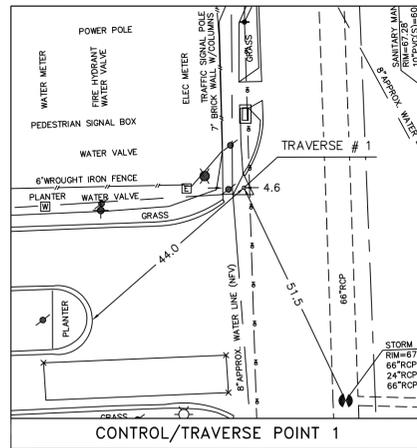
SUBMITTED: 8/18/23	DESIGNED BY: CW
SCALE: NOT TO SCALE	DRAWN BY: LG
DATE: 05/02/2023	SHEET No.: 5 OF 101
SURVEY BY: CFA	DWG. No.:
F B No.: -	

PROJECT CONTROL TABLE						
SURFACE VALUES						
POINT	NORTHING	EASTING	STATION	OFFSET	ELEVATION	DESCRIPTION
1	13,852,204.98	3,078,655.70	0+01.36	L8.26	67.39	SET "X" CUT
2	13,852,171.62	3,079,182.82	9+30.25	R16.91	67.46	SET 5/8" IRON ROD W/CAP STAMPED "CFA TRAV"
3	13,852,329.29	3,079,528.97	9+16.56	R18.19	66.98	SET 5/8" IRON ROD W/CAP STAMPED "CFA TRAV"
4	13,852,349.56	3,079,983.17	13+73.31	R15.44	66.58	SET 5/8" IRON ROD W/CAP STAMPED "CFA TRAV"
5	13,852,387.16	3,080,402.11	40+87.66	L17.35	64.89	SET MAG NAIL W/WASHER
6	13,852,268.59	3,080,608.01	20+15.19	R16.43	66.30	SET 5/8" IRON ROD W/CAP STAMPED "CFA TRAV"
7	13,852,289.61	3,081,295.20	26+95.24	R24.96	66.47	SET 5/8" IRON ROD W/CAP STAMPED "CFA TRAV"
8	13,852,632.11	3,081,345.96	69+57.42	R11.49	65.10	SET "X" CUT
9	13,852,645.92	3,080,942.67	65+84.95	L17.69	65.86	SET MAG NAIL W/WASHER
10	13,852,577.52	3,081,106.79	53+29.06	L9.79	65.14	SET MAG NAIL W/WASHER
11	13,852,534.84	3,080,377.22	46+21.77	L34.56	66.48	SET MAG NAIL W/WASHER
12	13,852,594.28	3,080,436.82	60+47.50	R14.63	65.56	SET MAG NAIL W/WASHER
50	13,852,611.70	3,080,611.56	62+22.78	R3.88	66.40	SET MAG NAIL W/WASHER
51	13,852,936.24	3,080,569.79	47+90.88	R10.99	65.86	SET "X" CUT

HORIZONTAL DATUM
 ALL COORDINATES SHOWN HEREON ARE GRID COORDINATES BASED ON THE TEXAS COORDINATE SYSTEM OF 1983, SOUTH CENTRAL ZONE. ALL DISTANCES SHOWN HEREON ARE SURFACE HORIZONTAL DISTANCES. MULTIPLY BY A COMBINED SCALE FACTOR OF 0.99989634 TO OBTAIN GRID DISTANCES.

PROJECT REFERENCE BENCHMARK
 TSARP FLOODPLAIN REFERENCE MARK NUMBER 210205 IS A HARRIS COUNTY FLOOD CONTROL DISTRICT BRASS DISK STAMPED "W140 BMO1" LOCATED ALONG MEMORIAL DRIVE 0.1 MILE EAST OF THE INTERSECTION OF MEMORIAL DRIVE WITH CHIMNEY ROCK ROAD, ON THE SOUTH SIDEWALK OF THE BRIDGE CROSSING SPRING BRANCH (STREAM NO. W140-00-00).
 ELEVATION = 58.04 (FEET) NAVD 1988, 2001 ADJUSTMENT

D:\PROJECTS\2023\12056_CITY_OF_SPRING_VALLEY_VILLAGE\01_BRIGHTON_PLACE_RECONSTRUCTION\400_CAD\402_SURVEY_CONTROL_SHEET.DWG



NOTICE:
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VERIFICATION OF PRIVATE UTILITY LINES

DATE _____
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 SIGNATURE VALID FOR SIX MONTHS.

DATE _____
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 SIGNATURE VALID FOR SIX MONTHS.

DATE _____
 AT&T TEXAS/SWBT UTILITY LINES SHOWN APPROVED FOR AT&T TEXAS/SWBT UNDERGROUND CONDUIT FACILITIES ONLY. SIGNATURE VALID FOR ONE YEAR.

NO.	DATE	REVISIONS



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 Houston, Texas 77040
 713.462.3242 | fax 713.462.3262
 www.cobbfendley.com

CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

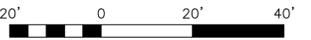
SURVEY CONTROL (2 OF 2)

SUBMITTED: 8/18/23 DESIGNED BY: CW
 SCALE: 1"=20' DRAWN BY: LG
 DATE: 05/02/2023 SHEET No.: 6 OF 101
 SURVEY BY: CFA DWG. No.:
 F B No.: -

PROJECT CONTROL TABLE						
SURFACE VALUES						
POINT	NORTHING	EASTING	STATION	OFFSET	ELEVATION	DESCRIPTION
1	13,852,204.98	3,078,655.70	0+01.36	L8.26	67.39	SET "X" CUT
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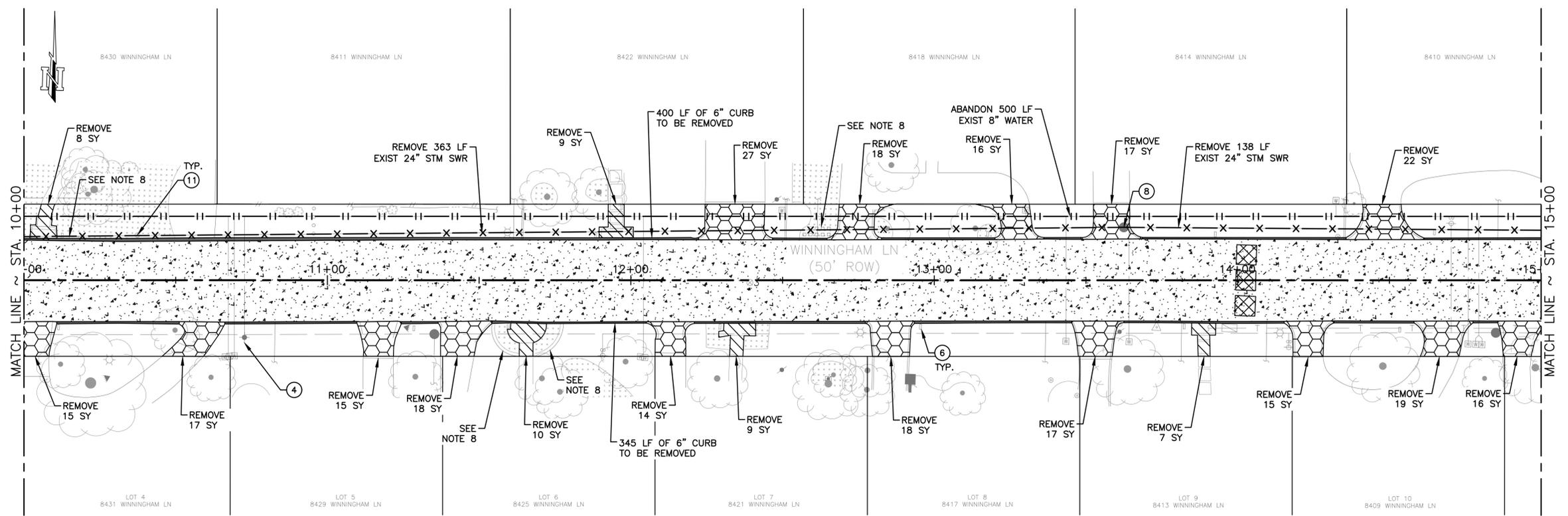


DEMOLITION LEGEND

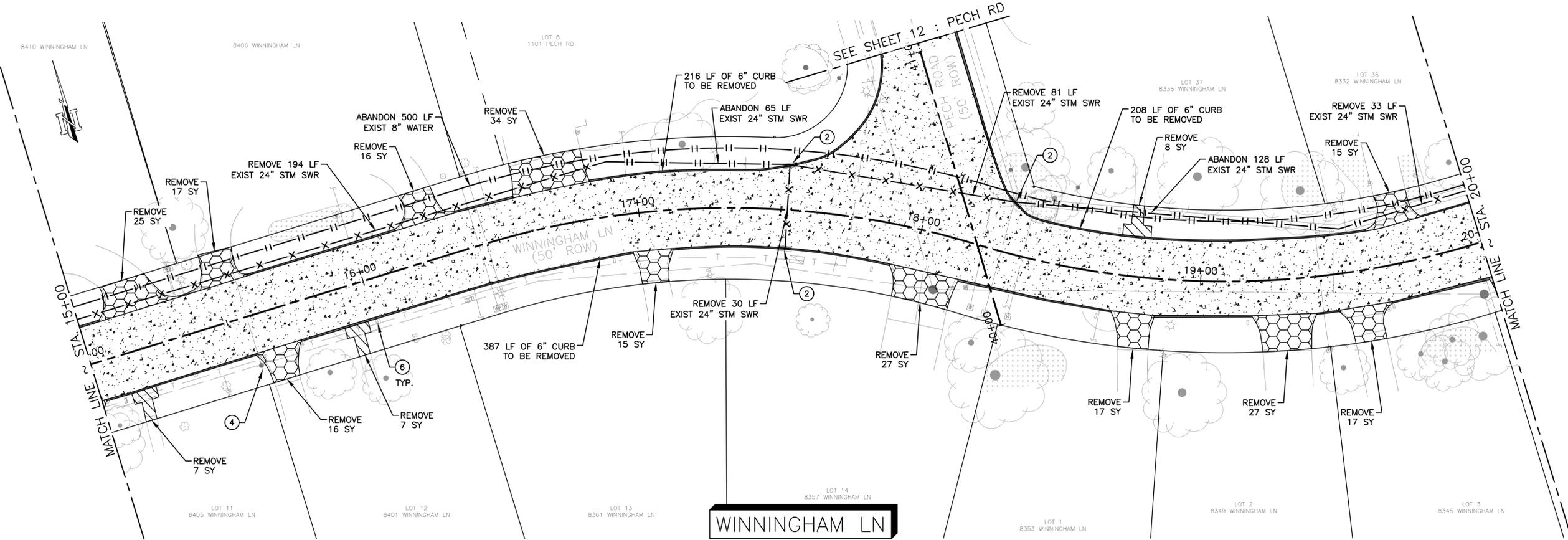
- X— PIPE REMOVAL
- ||— PIPE ABANDONMENT
- [Pattern] LIMITS OF CONCRETE PAVEMENT REMOVAL
- [Pattern] LIMITS OF DRIVEWAY REMOVAL
- [Pattern] LIMITS OF WALKWAY REMOVAL
- [Pattern] LIMITS OF CURB REMOVAL
- [Pattern] LIMITS OF SPEEDBUMP REMOVAL

- ① SAWCUT EXIST CONC PAVEMENT FULL DEPTH (NO SEPARATE ITEM)
- ② REMOVE AND DISPOSE EXIST STM SWR INLET
- ③ REMOVE AND DISPOSE EXIST MANHOLE
- ④ REMOVE FIRE HYDRANT
- ⑤ REMOVE EXIST STM SWR MANHOLE
- ⑥ MAILBOX TO BE REMOVED BY RESIDENT PRIOR TO CONSTRUCTION. CONTRACTOR TO REMOVE AND PLACE MAILBOX ON ROW.
- ⑦ REMOVE TRAFFIC SIGN
- ⑧ REMOVE TOP FOOT OF MANHOLE. GROUT FILL EXISTING MANHOLE.
- ⑨ CAP AND PLUG LINE
- ⑩ REMOVE TRAFFIC LOOPS. ADJUST TRAFFIC SIGNAL AS NEEDED FOR CONSTRUCTION.
- ⑪ REMOVE IRRIGATION AND CAP AT ROAD RIGHT-OF-WAY.

- NOTES:**
1. SEE TREE PROTECTION PLAN FOR DETAILS.
 2. WATER METERS ARE TO REMAIN. CONTRACTOR TO NOTIFY THE CITY IF ANY WATER METERS ARE DAMAGED.
 3. PRIVATE IRRIGATION SYSTEMS INSTALLED IN THE ROAD RIGHT-OF-WAY WILL BE REMOVED AND CAPPED AT THE ROAD RIGHT-OF-WAY. IRRIGATION SYSTEMS FOR PUBLIC LANDSCAPING, MEDIAN, PARK, ETC. WILL BE REPLACED AS NEEDED. COST IS INCIDENTAL TO CONSTRUCTION.
 4. EXISTING STORM SEWER THAT IS NOT IN CONFLICT WITH PROPOSED STORM SEWER MAY BE ABANDONED IN PLACE.
 5. PROTECT EXISTING SANITARY SEWER.
 6. PROVIDE TEMPORARY MAILBOXES AS NEEDED.
 7. REFER TO DRIVEWAY AND WALKWAY SUMMARY TABLES ON SHEETS 25-27 FOR EXISTING MATERIAL TO BE REMOVED.
 8. CONTRACTOR TO REMOVE LANDSCAPE HARDSCAPE AND STOCKPILE AT ROW.
 9. INSPECTOR MAY FIELD ADJUST PAVEMENT REMOVAL TO MATCH EXISTING JOINTS.



WINNINGHAM LN



WINNINGHAM LN

NO.	DATE	REVISIONS



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 Houston, Texas 77040
 713.462.3242 | fax 713.462.3262
 www.cobbfendley.com

CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

WINNINGHAM LN
 DEMOLITION PLAN (2 OF 5)

SUBMITTED: 12/04/23	DESIGNED BY: JMS
SCALE: 1"=20'	DRAWN BY: JS
DATE: 12/04/23	SHEET No.: 8 OF 101
SURVEY BY: CFA	DWG. No.:
F B No.: -	

D:\PROJECTS\2022\12056_CITY_OF_SPRING_VALLEY_VILLAGE\01_BRIGHTON_PLACE_RECONSTRUCTION\400_CAD\412_MUN\ SHEETS\2212-056_DEMO_WINNINGHAM-KRIST.DWG

20' 0 20' 40'

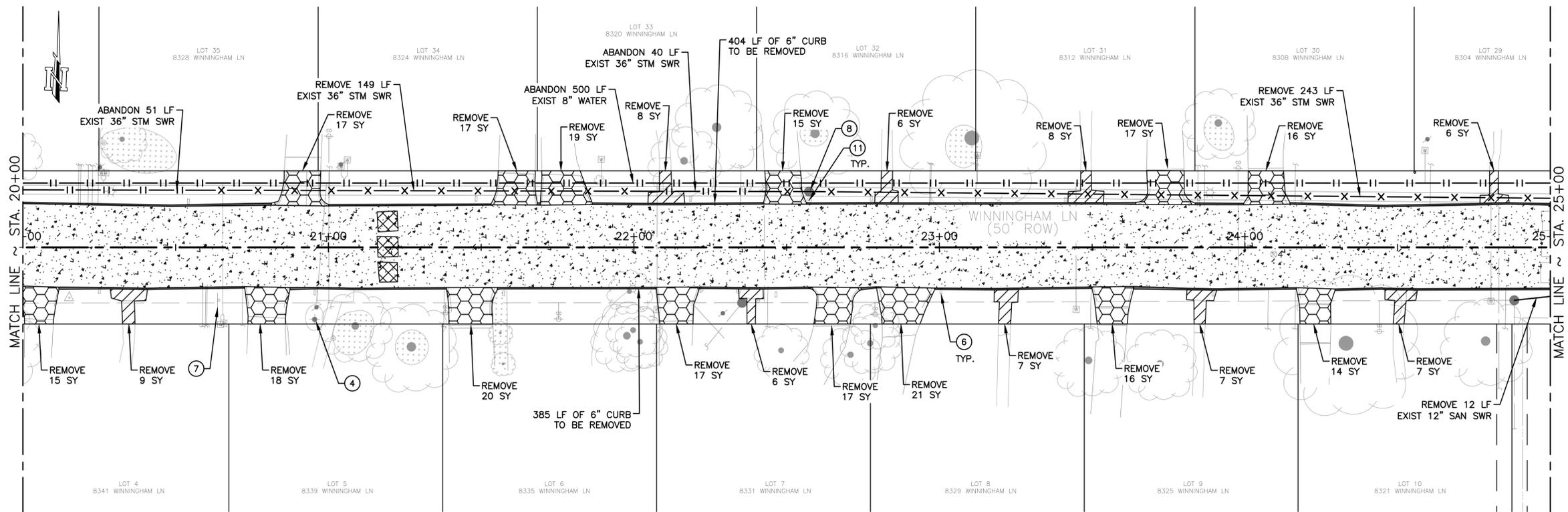
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DEMOLITION LEGEND

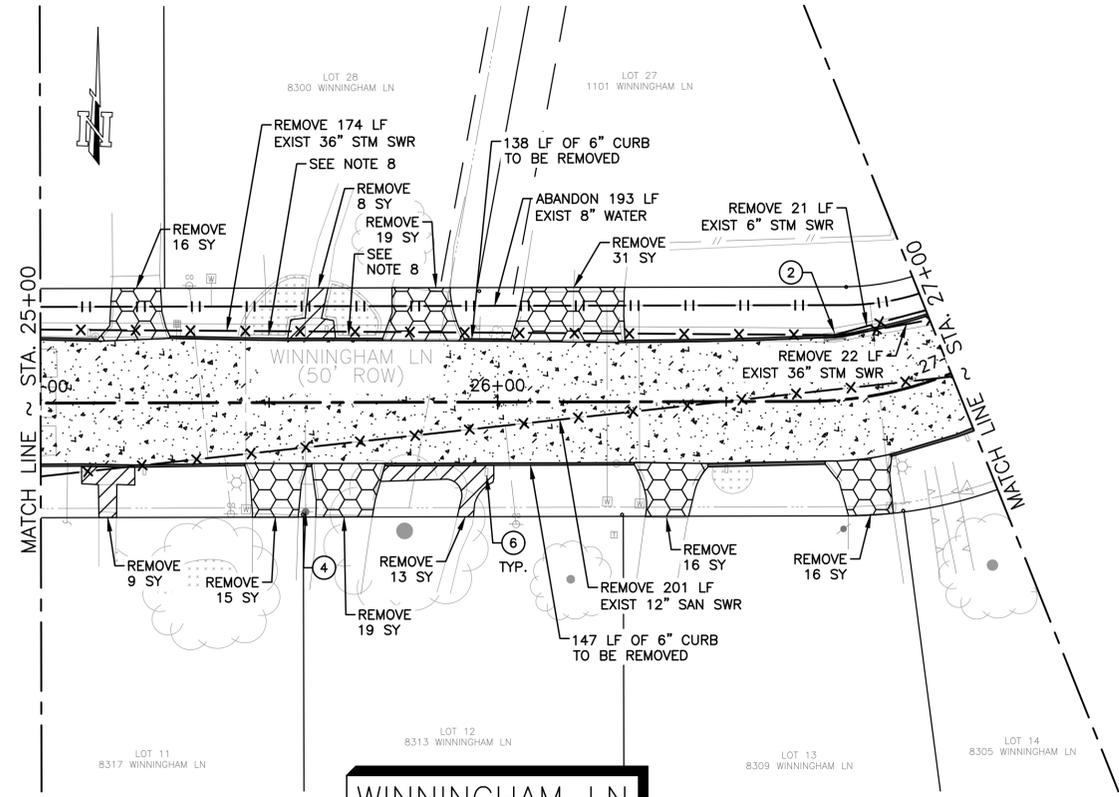
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- ||— PIPE ABANDONMENT
- [Pattern] LIMITS OF CONCRETE PAVEMENT REMOVAL
- [Pattern] LIMITS OF DRIVEWAY REMOVAL
- [Pattern] LIMITS OF WALKWAY REMOVAL
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 8. CONTRACTOR TO REMOVE LANDSCAPE HARDSCAPE AND STOCKPILE AT ROW.
 9. INSPECTOR MAY FIELD ADJUST PAVEMENT REMOVAL TO MATCH EXISTING JOINTS.



WINNINGHAM LN



WINNINGHAM LN

NO.	DATE	REVISIONS

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 www.cobbfendley.com

CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

KRIST DR
 DEMOLITION PLAN (3 OF 5)

SUBMITTED: 12/04/23	DESIGNED BY: JMS
SCALE: 1"=20'	DRAWN BY: JS
DATE: 12/04/23	SHEET No.: 9 OF 101
SURVEY BY: CFA	DWG. No.:
F B No.: -	

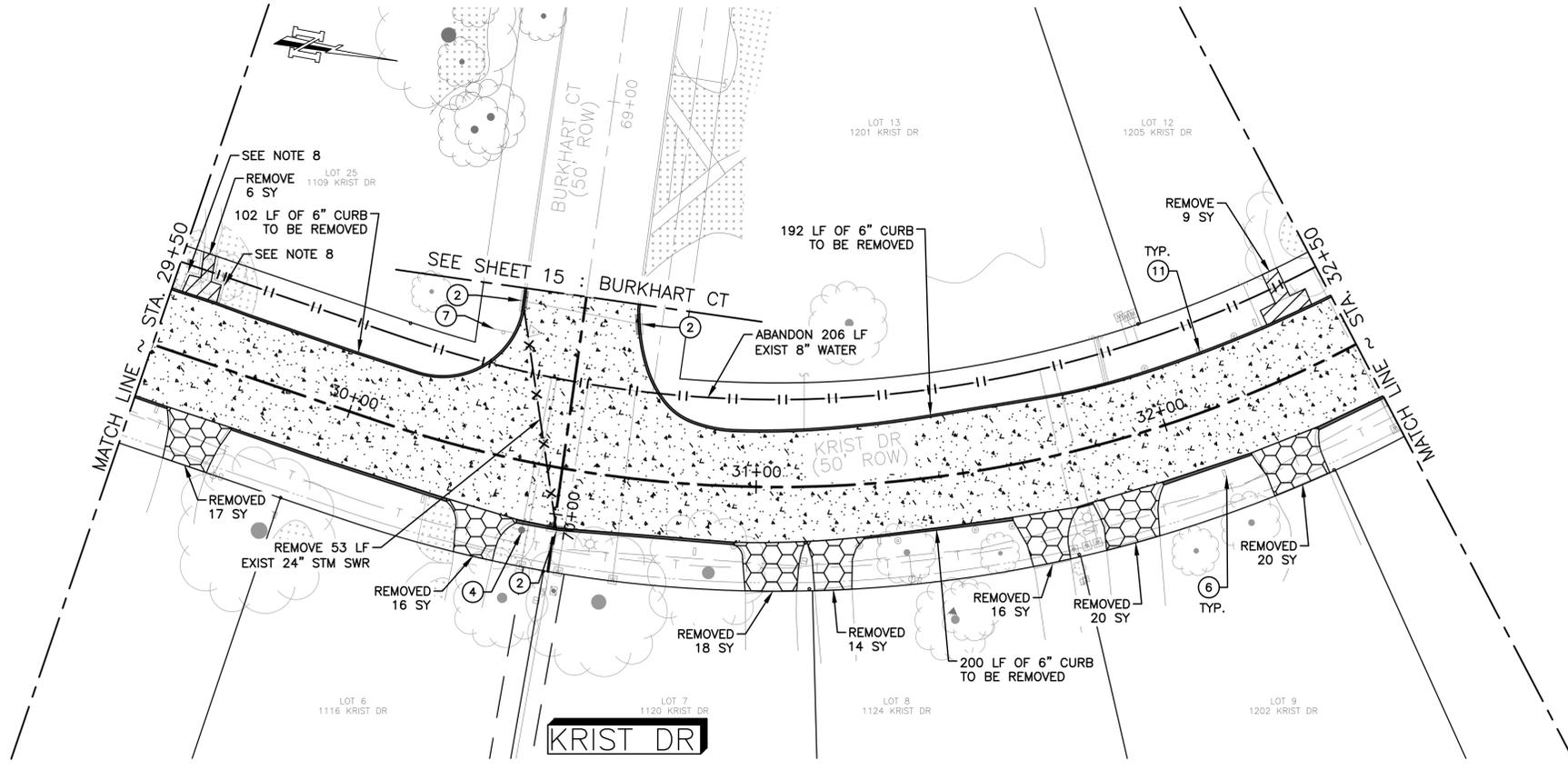
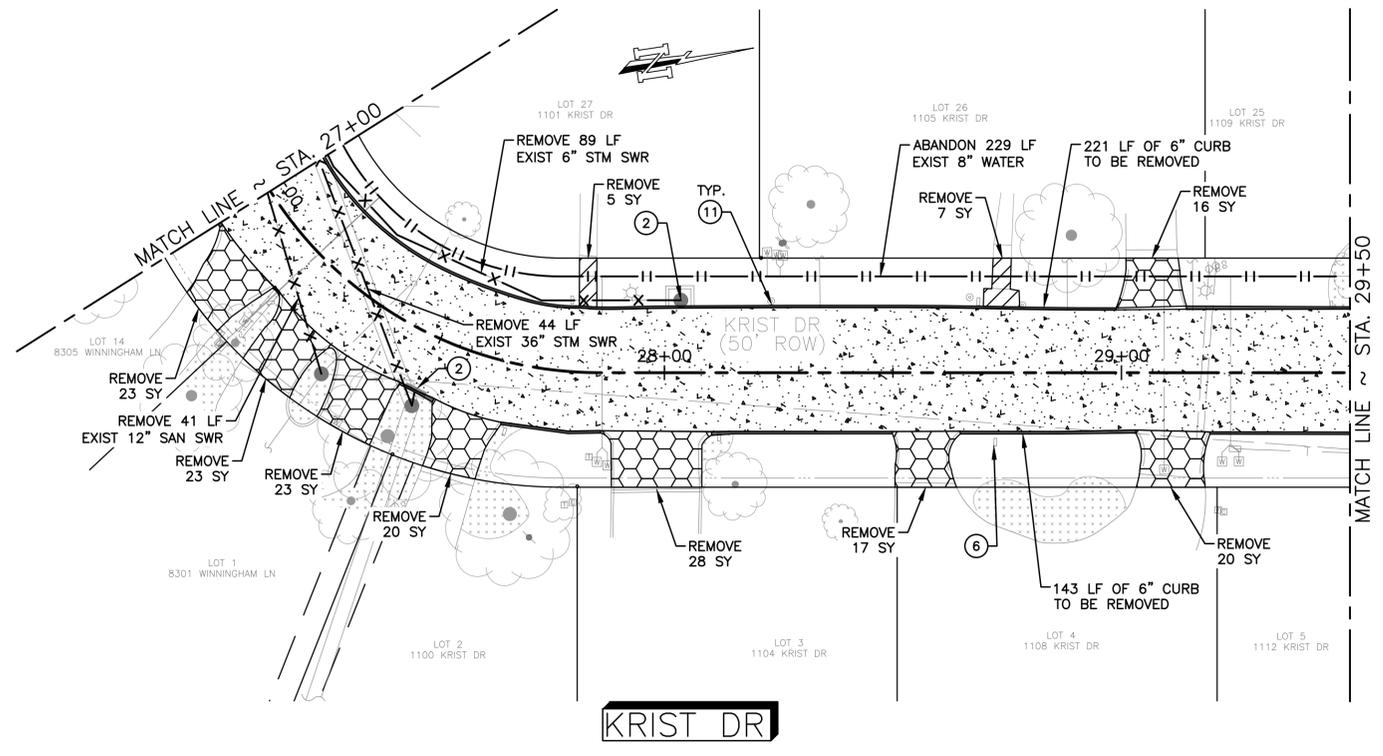
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DEMOLITION LEGEND

- X— PIPE REMOVAL
- ||— PIPE ABANDONMENT
- [Pattern] LIMITS OF CONCRETE PAVEMENT REMOVAL
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- [Pattern] LIMITS OF CURB REMOVAL
- [Pattern] LIMITS OF SPEEDBUMP REMOVAL

- ① SAWCUT EXIST CONC PAVEMENT FULL DEPTH (NO SEPARATE ITEM)
- ② REMOVE AND DISPOSE EXIST STM SWR INLET
- ③ REMOVE AND DISPOSE EXIST MANHOLE
- ④ REMOVE FIRE HYDRANT
- ⑤ REMOVE EXIST STM SWR MANHOLE
- ⑥ MAILBOX TO BE REMOVED BY RESIDENT PRIOR TO CONSTRUCTION. CONTRACTOR TO REMOVE AND PLACE MAILBOX ON ROW.
- ⑦ REMOVE TRAFFIC SIGN
- ⑧ REMOVE TOP FOOT OF MANHOLE. GROUT FILL EXISTING MANHOLE.
- ⑨ CAP AND PLUG LINE
- ⑩ REMOVE TRAFFIC LOOPS. ADJUST TRAFFIC SIGNAL AS NEEDED FOR CONSTRUCTION.
- ⑪ REMOVE IRRIGATION AND CAP AT ROAD RIGHT-OF-WAY.

- NOTES:
1. SEE TREE PROTECTION PLAN FOR DETAILS.
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 6. PROVIDE TEMPORARY MAILBOXES AS NEEDED.
 7. REFER TO DRIVEWAY AND WALKWAY SUMMARY TABLES ON SHEETS 25-27 FOR EXISTING MATERIAL TO BE REMOVED.
 8. CONTRACTOR TO REMOVE LANDSCAPE HARDSCAPE AND STOCKPILE AT ROW.
 9. INSPECTOR MAY FIELD ADJUST PAVEMENT REMOVAL TO MATCH EXISTING JOINTS.



NO.	DATE	REVISIONS



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CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

KRIST DR
 DEMOLITION PLAN (4 OF 5)

SUBMITTED: 12/04/23	DESIGNED BY: JMS
SCALE: 1"=20'	DRAWN BY: JS
DATE: 12/04/23	SHEET No.: 10 OF 101
SURVEY BY: CFA	DWG. No.:
F B No.: -	

20' 0 20' 40'

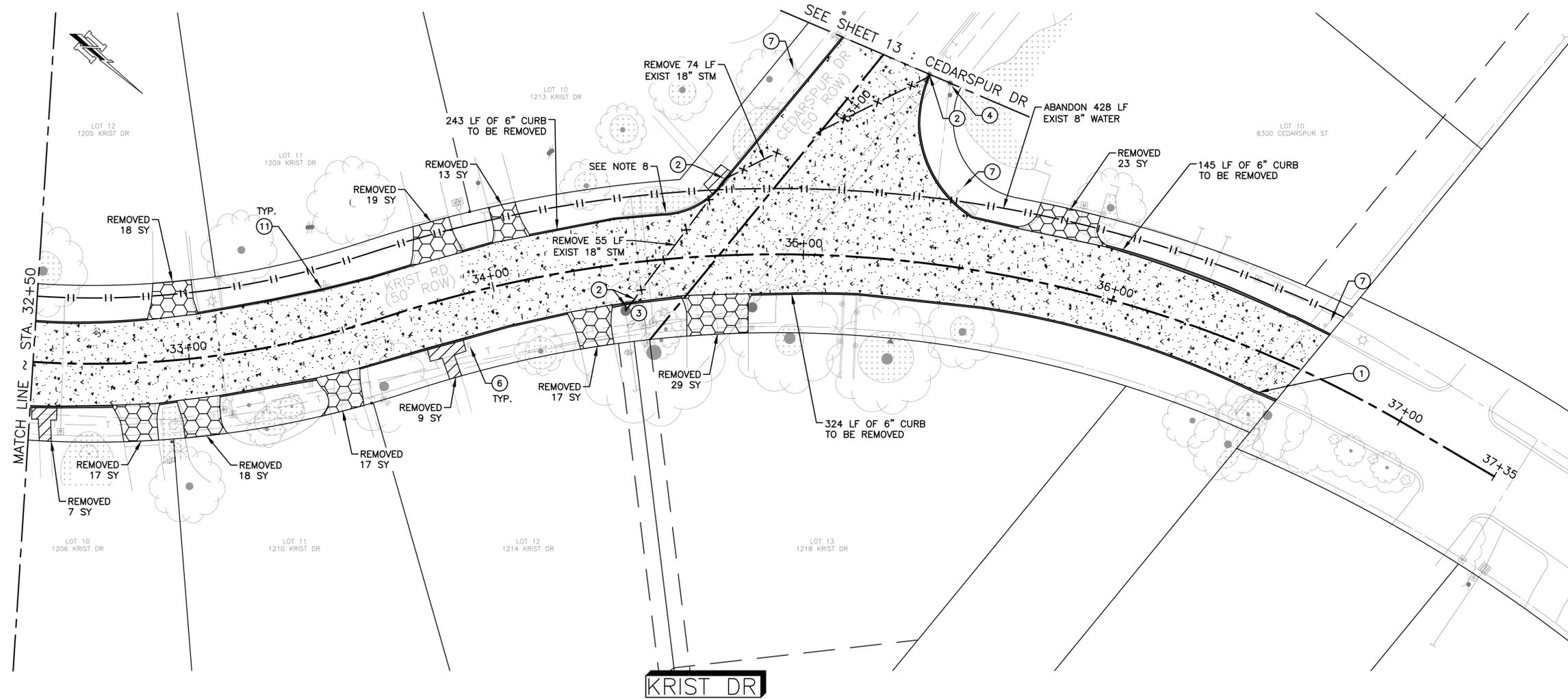
GRAPHIC SCALE IN FEET

DEMOLITION LEGEND

- X— PIPE REMOVAL
- ||— PIPE ABANDONMENT
- [Pattern] LIMITS OF CONCRETE PAVEMENT REMOVAL
- [Pattern] LIMITS OF DRIVEWAY REMOVAL
- [Pattern] LIMITS OF WALKWAY REMOVAL
- [Pattern] LIMITS OF CURB REMOVAL
- [Pattern] LIMITS OF SPEEDBUMP REMOVAL

- ① SAWCUT EXIST CONC PAVEMENT FULL DEPTH (NO SEPARATE ITEM)
- ② REMOVE AND DISPOSE EXIST STM SWR INLET
- ③ REMOVE AND DISPOSE EXIST MANHOLE
- ④ REMOVE FIRE HYDRANT
- ⑤ REMOVE EXIST STM SWR MANHOLE
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- ⑨ CAP AND PLUG LINE
- ⑩ REMOVE TRAFFIC LOOPS. ADJUST TRAFFIC SIGNAL AS NEEDED FOR CONSTRUCTION.
- ⑪ REMOVE IRRIGATION AND CAP AT ROAD RIGHT-OF-WAY.

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KRIST DR

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CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

KRIST DR
DEMOLITION PLAN (5 OF 5)

SUBMITTED: 12/04/23	DESIGNED BY: JMS
SCALE: 1"=20'	DRAWN BY: JS
DATE: 12/04/23	SHEET No.: 11 OF 101
SURVEY BY: CFA	DWG. No.:
F B No.: -	

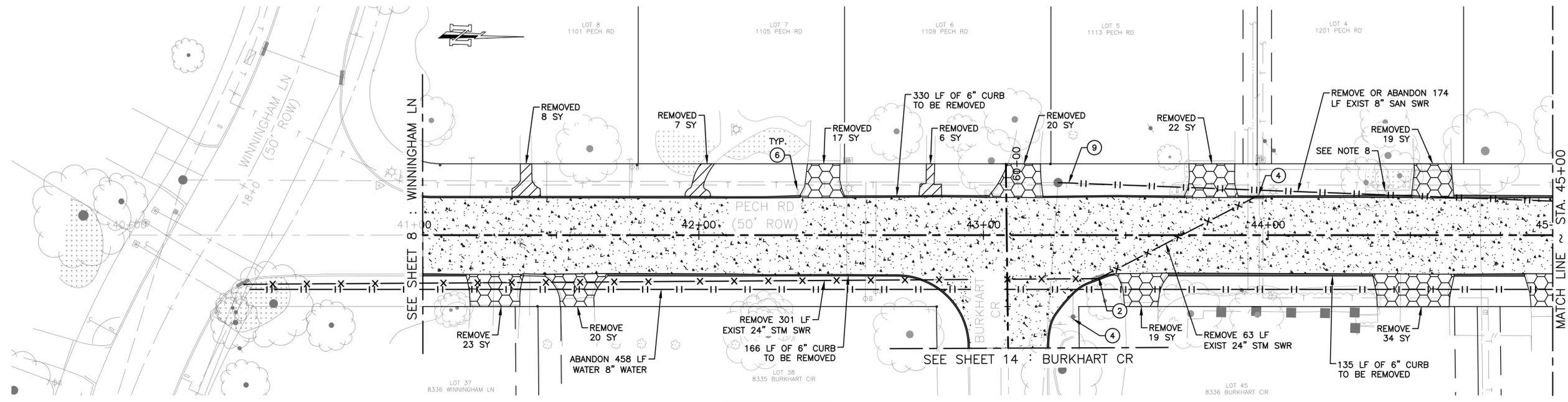
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DEMOLITION LEGEND

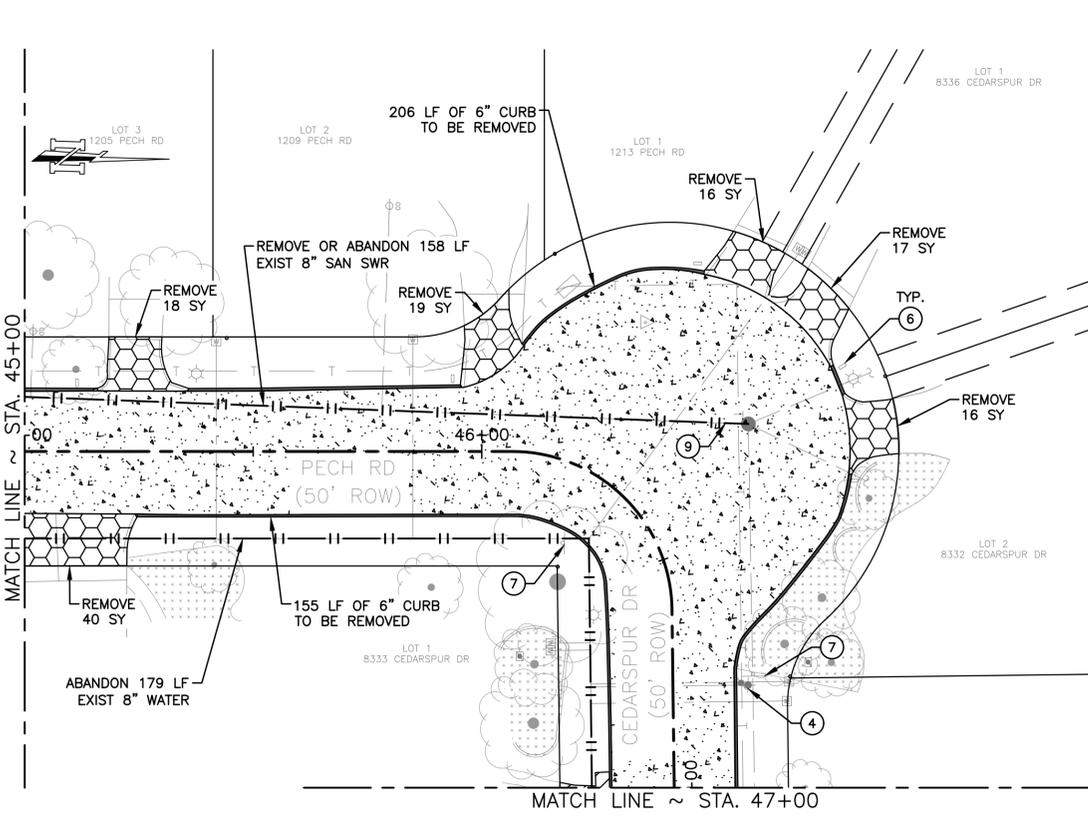
- X— PIPE REMOVAL
- ||— PIPE ABANDONMENT
- [Pattern] LIMITS OF CONCRETE PAVEMENT REMOVAL
- [Pattern] LIMITS OF DRIVEWAY REMOVAL
- [Pattern] LIMITS OF WALKWAY REMOVAL
- [Pattern] LIMITS OF CURB REMOVAL
- [Pattern] LIMITS OF SPEEDBUMP REMOVAL

- ① SAWCUT EXIST CONC PAVEMENT FULL DEPTH (NO SEPARATE ITEM)
- ② REMOVE AND DISPOSE EXIST STM SWR INLET
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- ⑪ REMOVE IRRIGATION AND CAP AT ROAD RIGHT-OF-WAY.

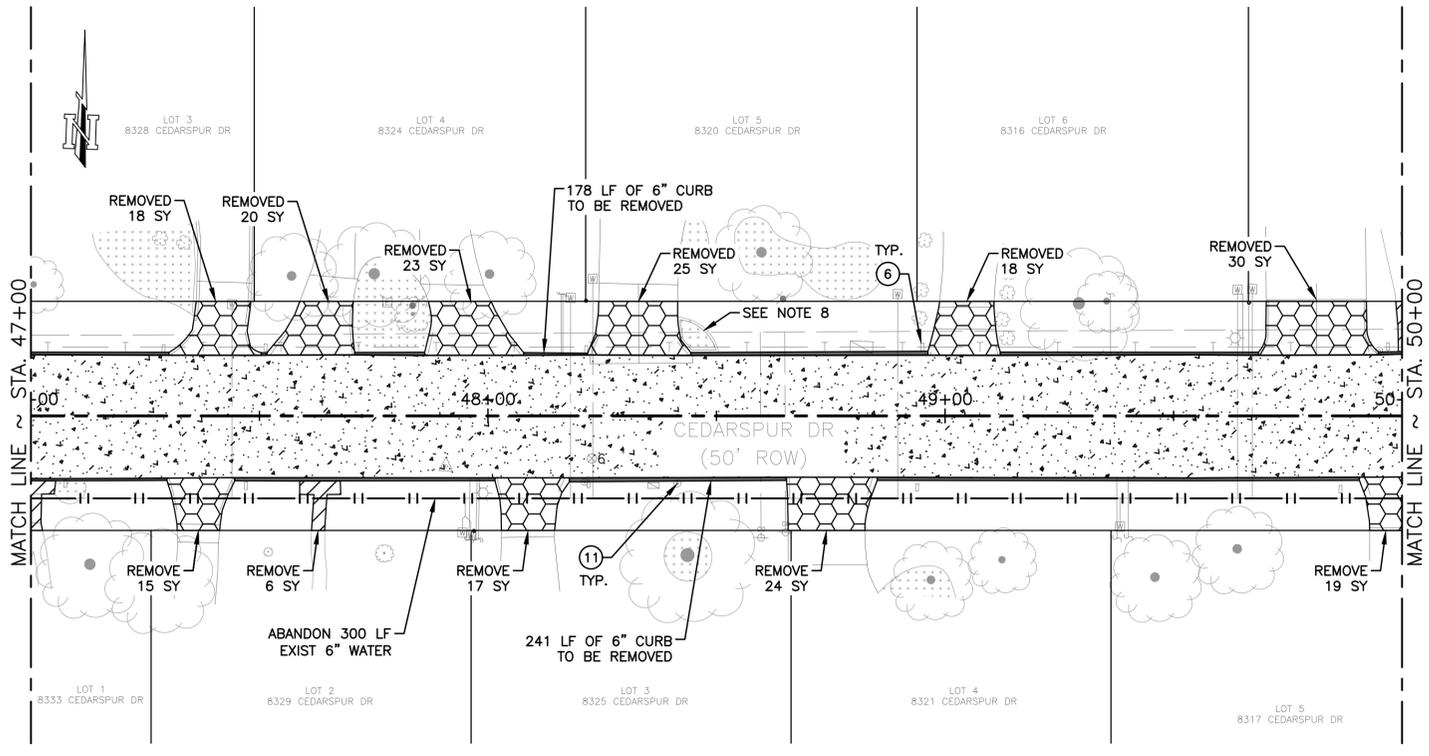
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PECH RD



PECH RD & CEDARSPUR DR



CEDARSPUR DR

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CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

PECH RD & CEDARSPUR ST
 DEMOLITION PLAN (1 OF 2)

SUBMITTED: 12/04/23	DESIGNED BY: JMS
SCALE: 1"=20'	DRAWN BY: JS
DATE: 12/04/23	SHEET No.: 12 OF 101
SURVEY BY: CFA	DWG. No.:
F B No.: -	

20' 0 20' 40'

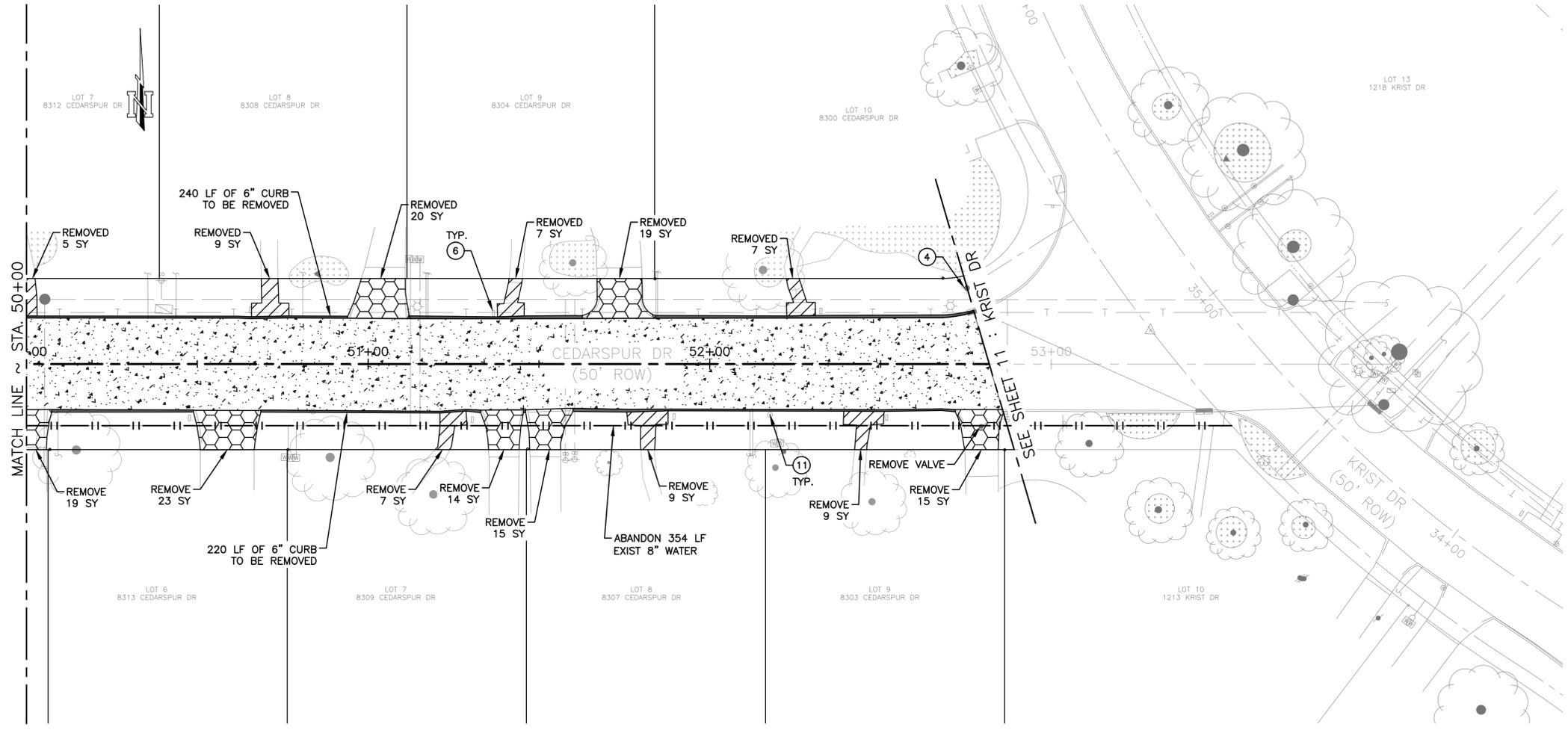
GRAPHIC SCALE IN FEET

DEMOLITION LEGEND

- X— PIPE REMOVAL
- ||— PIPE ABANDONMENT
- [Pattern] LIMITS OF CONCRETE PAVEMENT REMOVAL
- [Pattern] LIMITS OF DRIVEWAY REMOVAL
- [Pattern] LIMITS OF WALKWAY REMOVAL
- [Pattern] LIMITS OF CURB REMOVAL
- [Pattern] LIMITS OF SPEEDBUMP REMOVAL

- ① SAWCUT EXIST CONC PAVEMENT FULL DEPTH (NO SEPARATE ITEM)
- ② REMOVE AND DISPOSE EXIST STM SWR INLET
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- ⑩ REMOVE TRAFFIC LOOPS. ADJUST TRAFFIC SIGNAL AS NEEDED FOR CONSTRUCTION.
- ⑪ REMOVE IRRIGATION AND CAP AT ROAD RIGHT-OF-WAY.

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CEDARSPUR DR

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CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

PECH RD & CEDARSPUR ST
 DEMOLITION PLAN (2 OF 2)

SUBMITTED: 12/04/23	DESIGNED BY: JMS
SCALE: 1"=20'	DRAWN BY: JS
DATE: 12/04/23	SHEET No.: 13 OF 101
SURVEY BY: CFA	DWG. No.:
F B No.: -	

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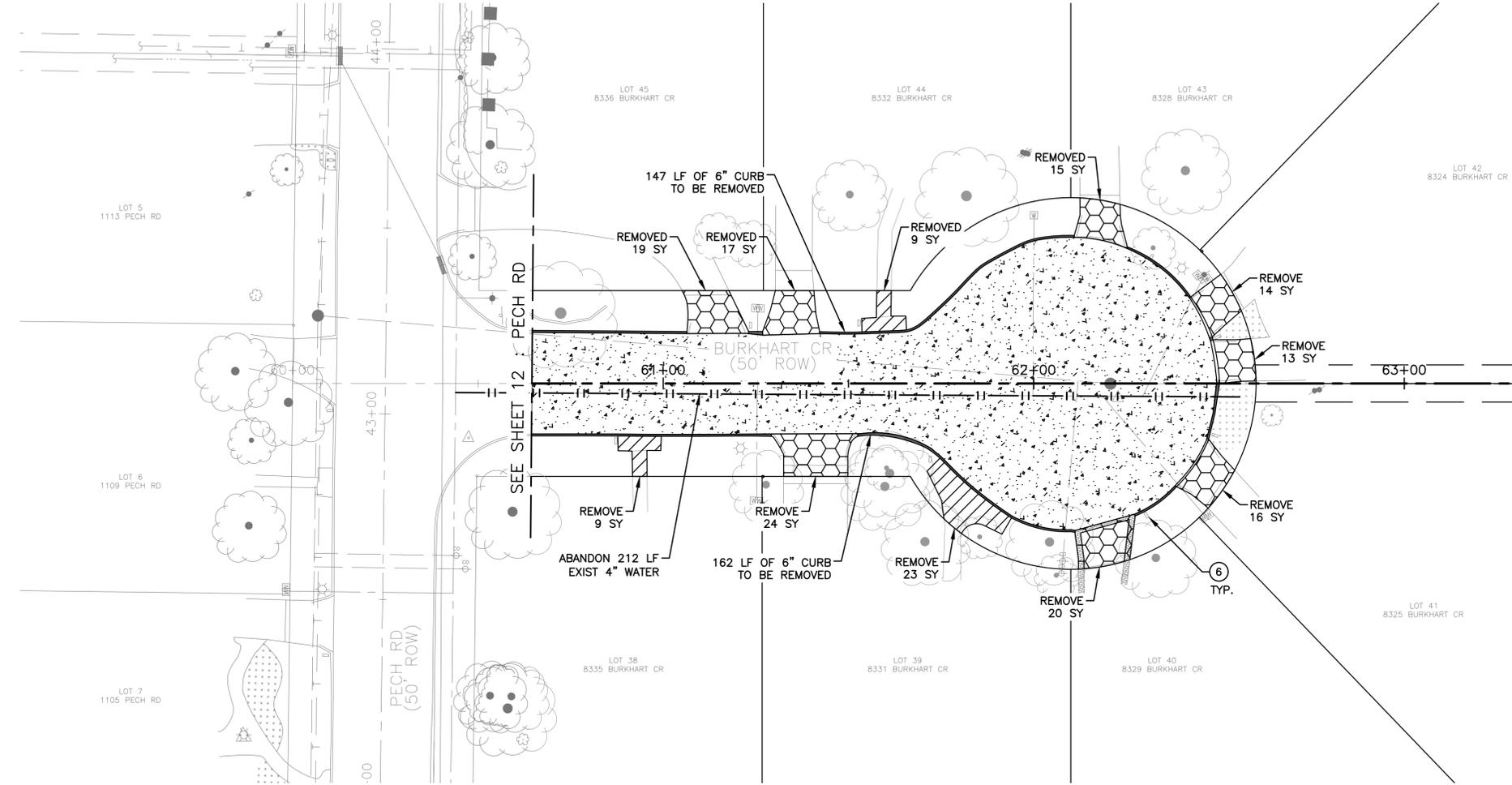
GRAPHIC SCALE IN FEET

DEMOLITION LEGEND

- X— PIPE REMOVAL
- ||— PIPE ABANDONMENT
- [Stippled Pattern] LIMITS OF CONCRETE PAVEMENT REMOVAL
- [Hexagonal Pattern] LIMITS OF DRIVEWAY REMOVAL
- [Diagonal Line Pattern] LIMITS OF WALKWAY REMOVAL
- [Solid Grey] LIMITS OF CURB REMOVAL
- [Cross-hatch Pattern] LIMITS OF SPEEDBUMP REMOVAL

- ① SAWCUT EXIST CONC PAVEMENT FULL DEPTH (NO SEPARATE ITEM)
- ② REMOVE AND DISPOSE EXIST STM SWR INLET
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BURKHART CR

NO.	DATE	REVISIONS



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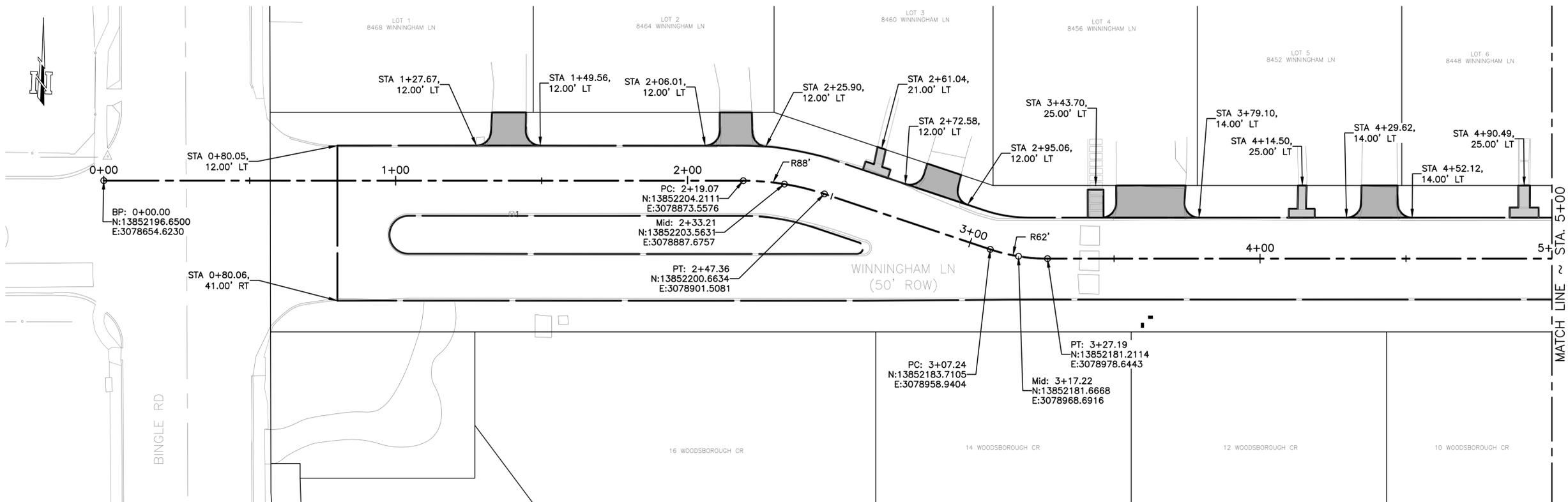
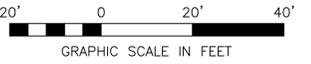
CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

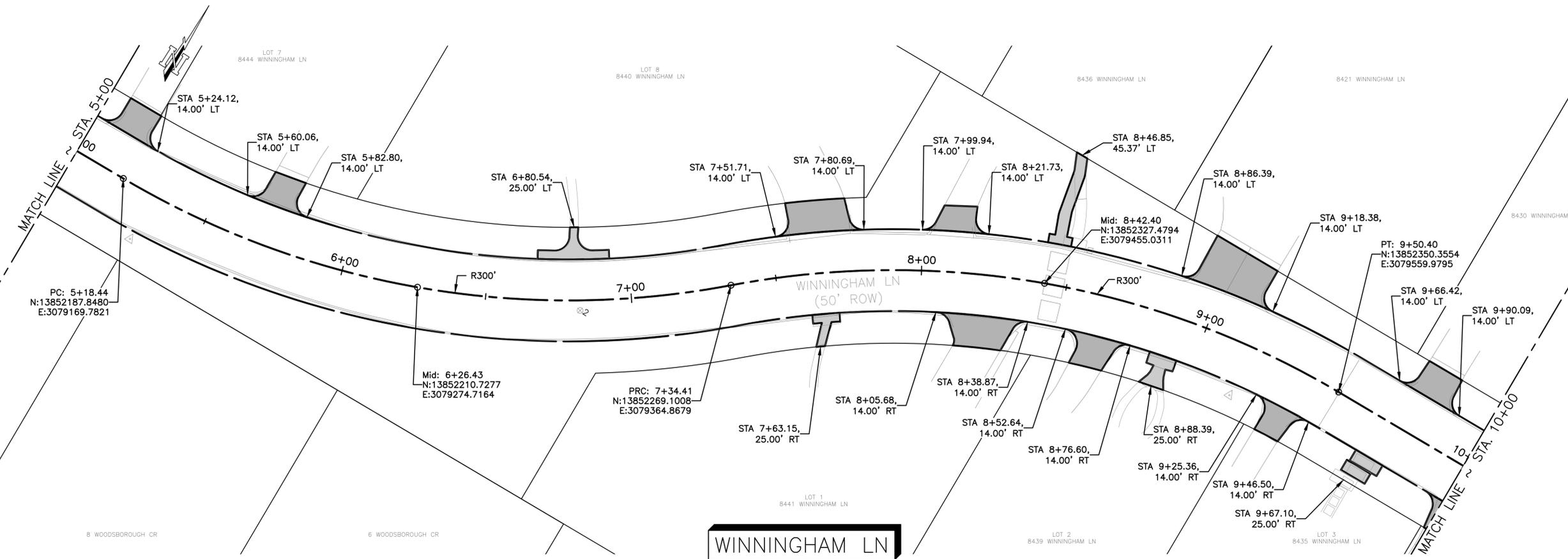
BURKHART CR
 DEMOLITION PLAN

SUBMITTED: 12/04/23	DESIGNED BY: JMS
SCALE: 1"=20'	DRAWN BY: JS
DATE: 12/04/23	SHEET No.: 14 OF 101
SURVEY BY: CFA	DWG. No.:
F B No.: -	

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WINNINGHAM LN



WINNINGHAM LN

NO.	DATE	REVISIONS



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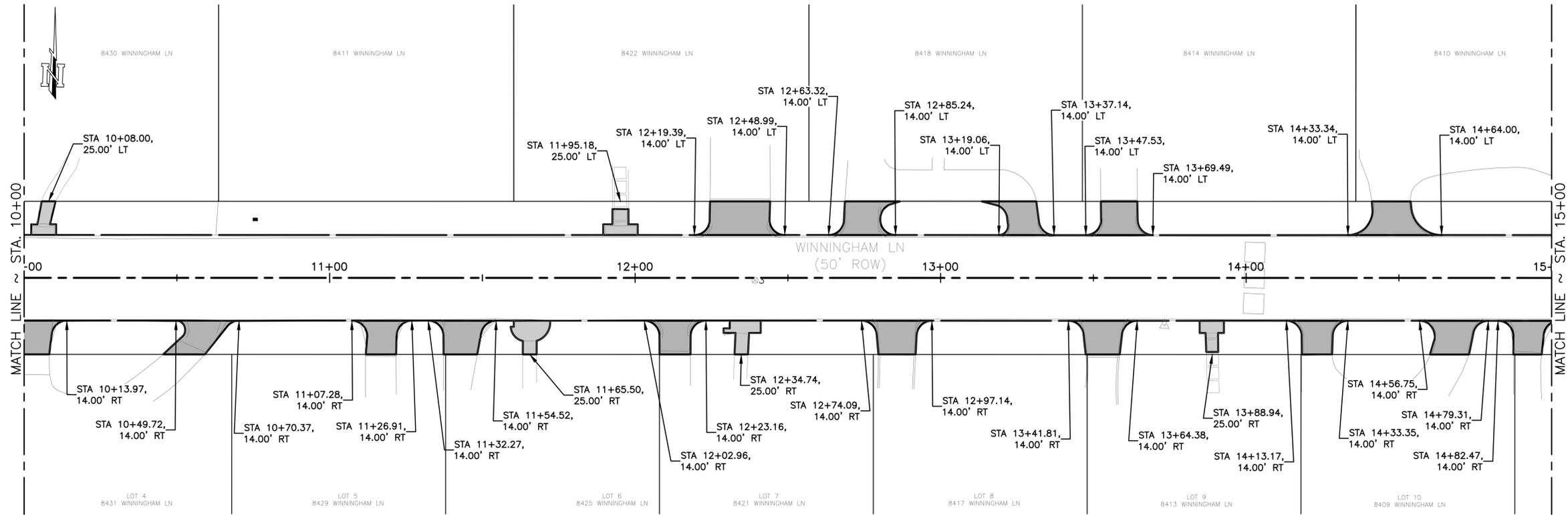
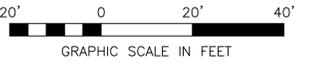
CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

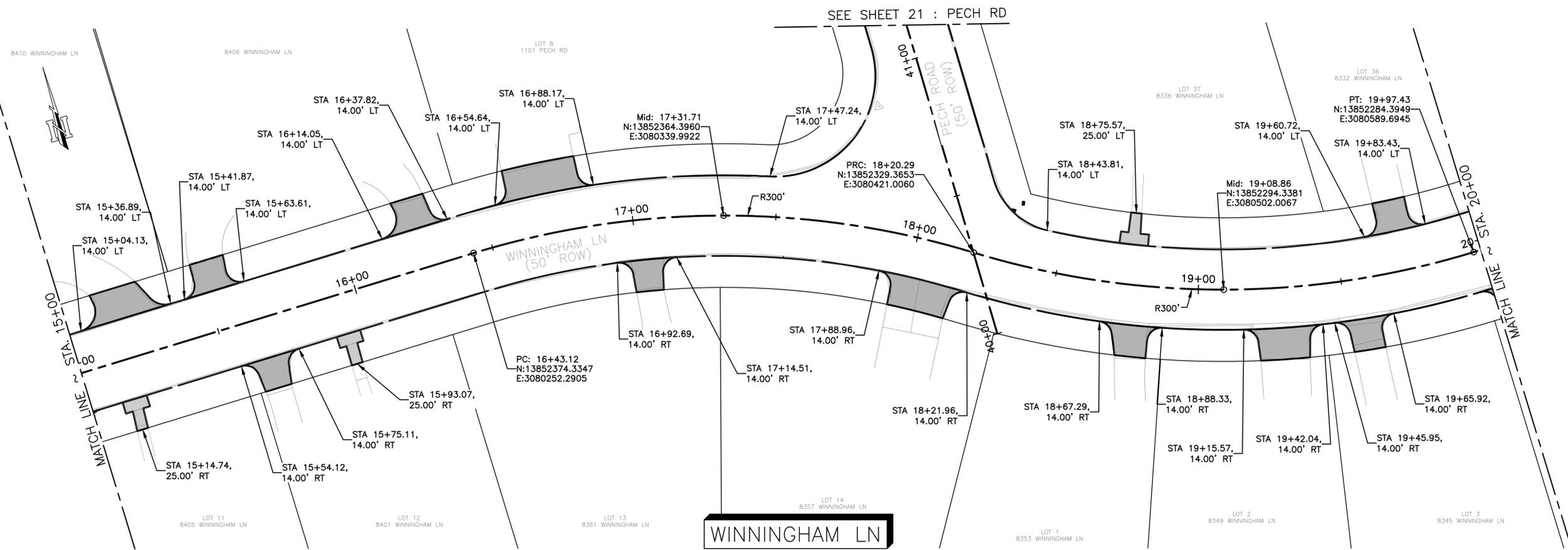
WINNINGHAM LN
 GEOMETRIC LAYOUT (1 OF 5)

SUBMITTED: 12/04/23	DESIGNED BY: JMS
SCALE: 1"=20'	DRAWN BY: AA
DATE: 12/04/23	SHEET No.: 16 OF 101
SURVEY BY: CFA	DWG. No.:
F B No.: -	

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WINNINGHAM LN



WINNINGHAM LN

NO.	DATE	REVISIONS



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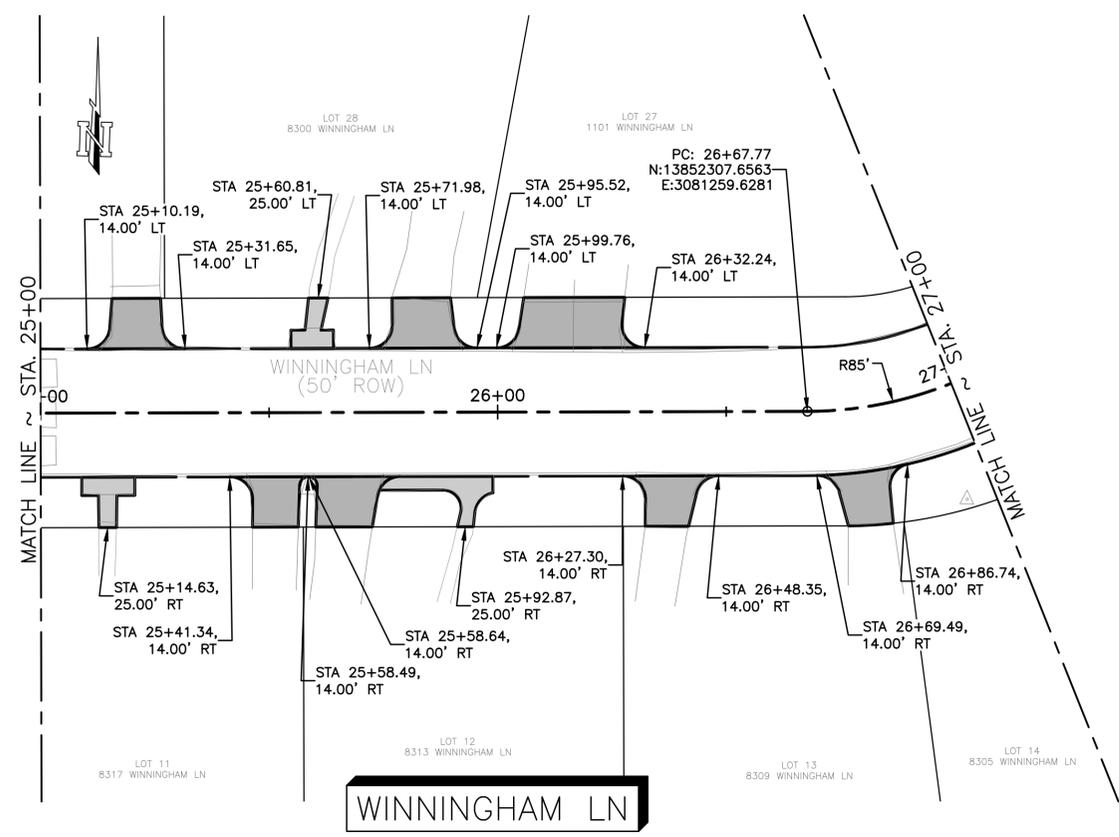
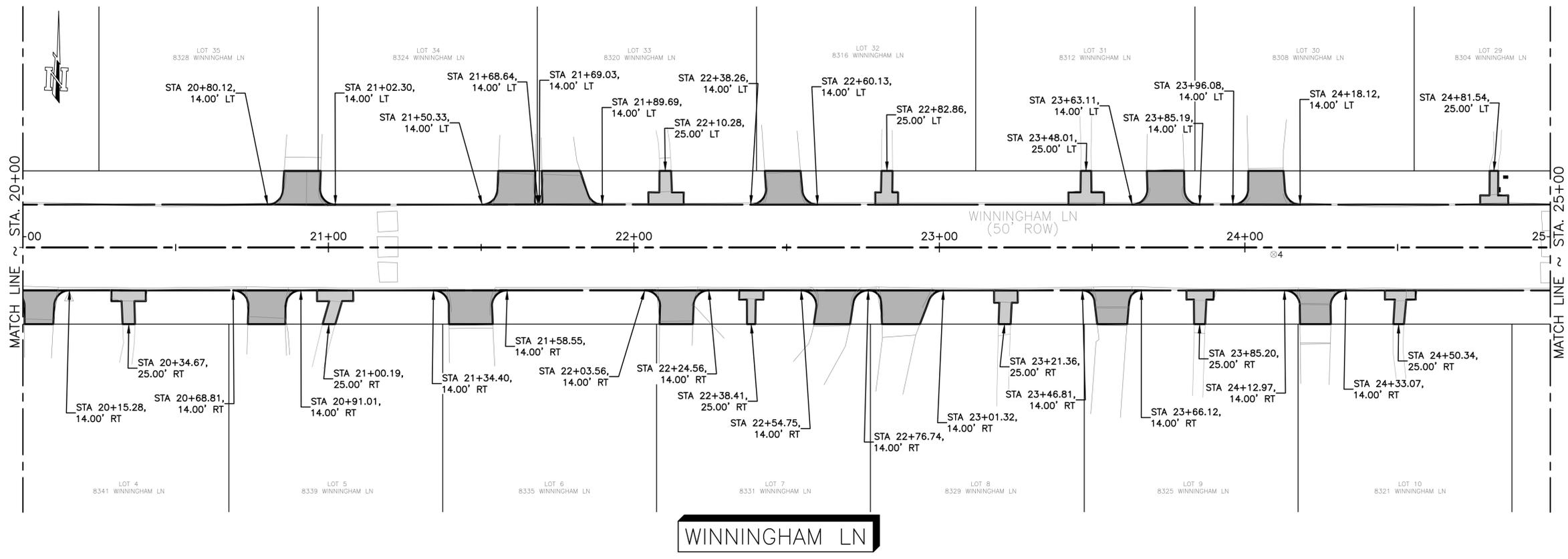
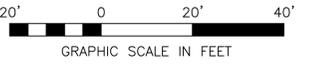
CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

WINNINGHAM LN
 GEOMETRIC LAYOUT (2 OF 5)

SUBMITTED: 12/04/23	DESIGNED BY: JMS
SCALE: 1"=20'	DRAWN BY: AA
DATE: 12/04/23	SHEET No.: 17 OF 101
SURVEY BY: CFA	DWG. No.:
F B No.: -	

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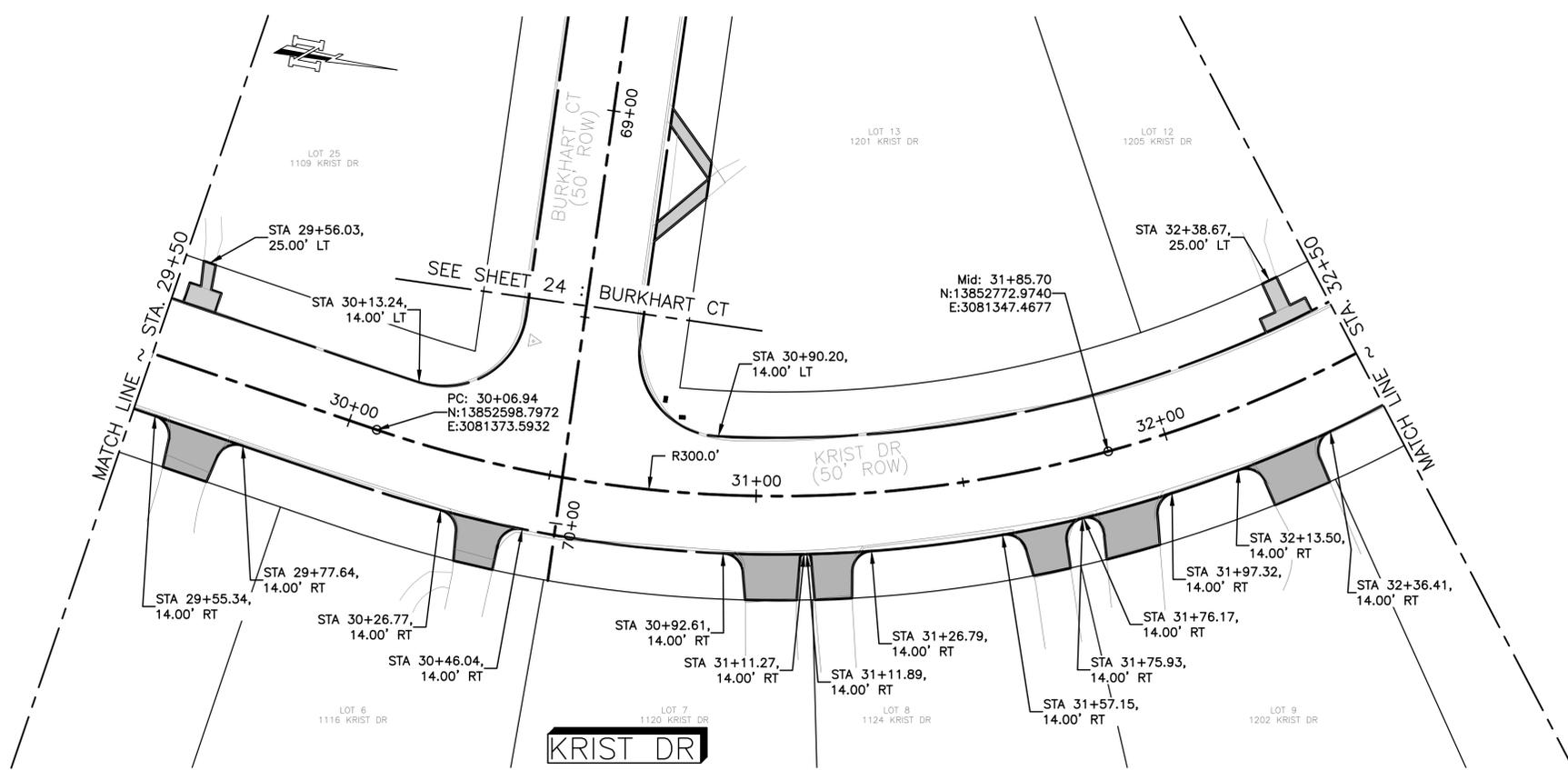
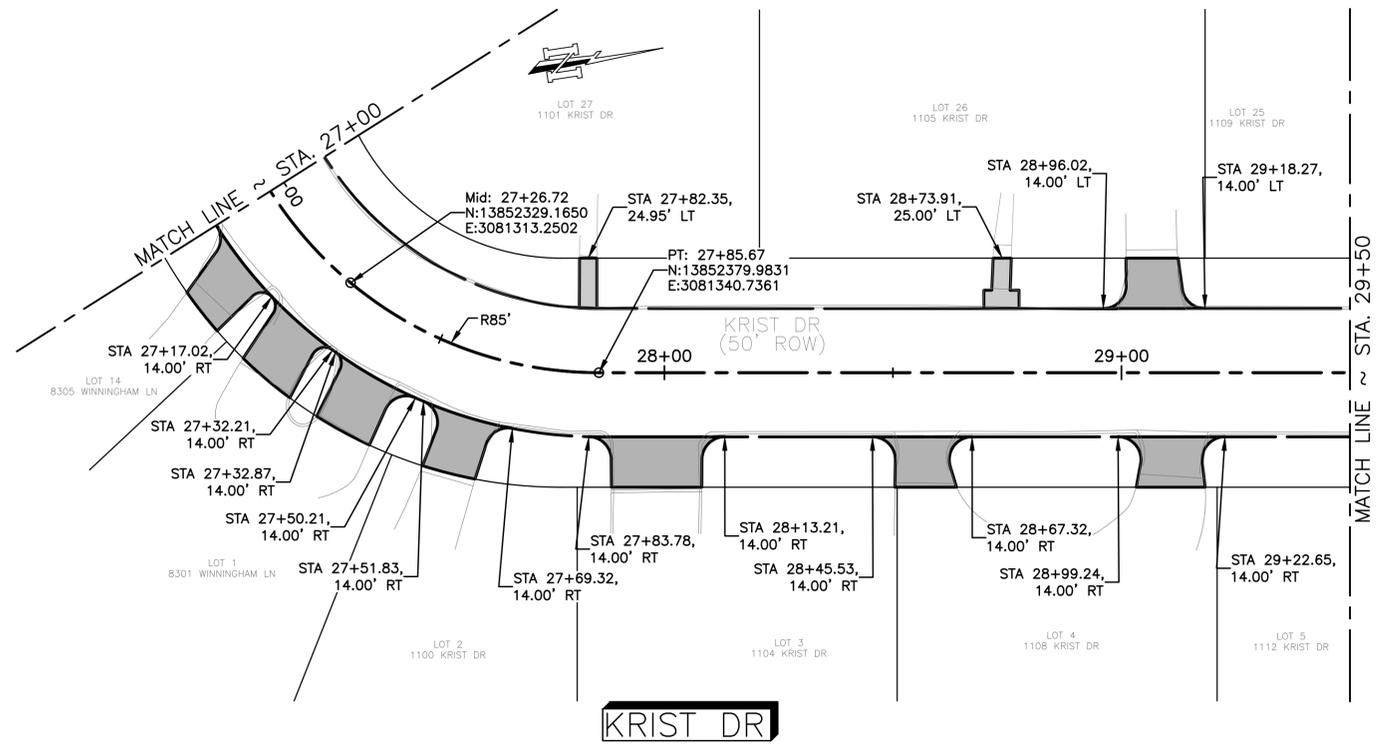
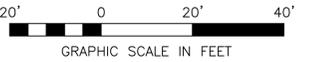
CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

WINNINGHAM LN
 GEOMETRIC LAYOUT (3 OF 5)

SUBMITTED: 12/04/23	DESIGNED BY: JMS
SCALE: 1"=20'	DRAWN BY: AA
DATE: 12/04/23	SHEET No.: 18 OF 101
SURVEY BY: CFA	DWG. No.:
F B No.: -	

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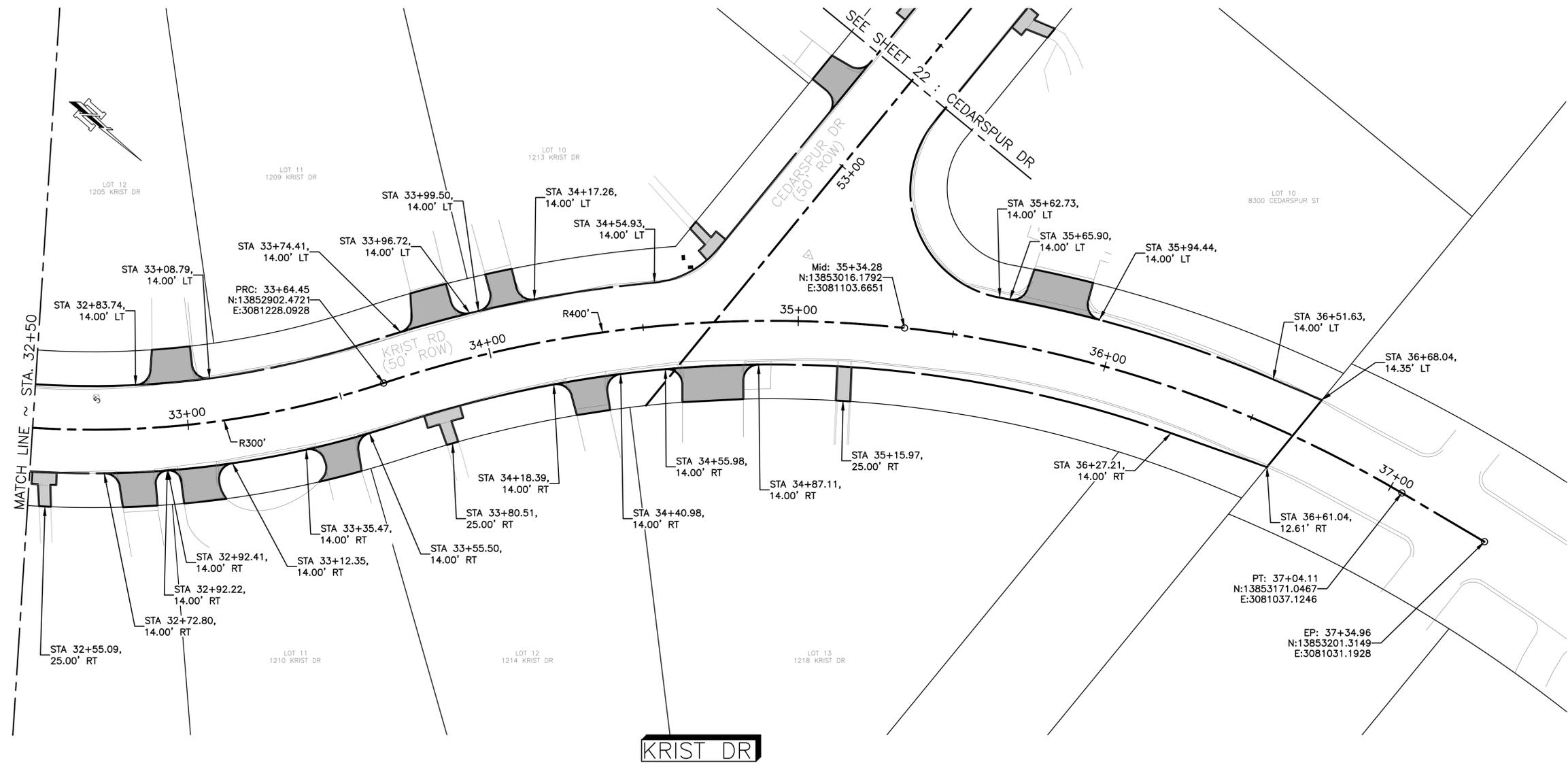
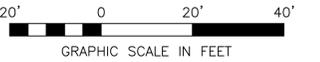
CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

KRIST DR
 GEOMETRIC LAYOUT (4 OF 5)

SUBMITTED: 12/04/23	DESIGNED BY: JMS
SCALE: 1"=20'	DRAWN BY: AA
DATE: 12/04/23	SHEET No.: 19 OF 101
SURVEY BY: CFA	DWG. No:
F B No.: -	

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KRIST DR

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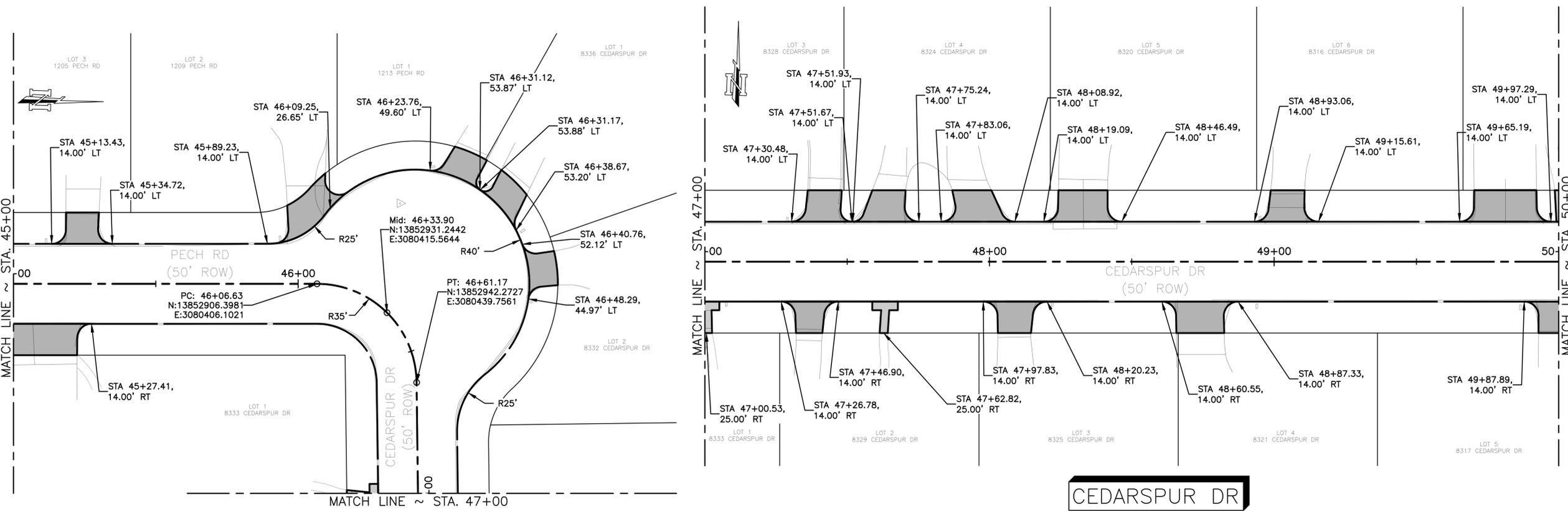
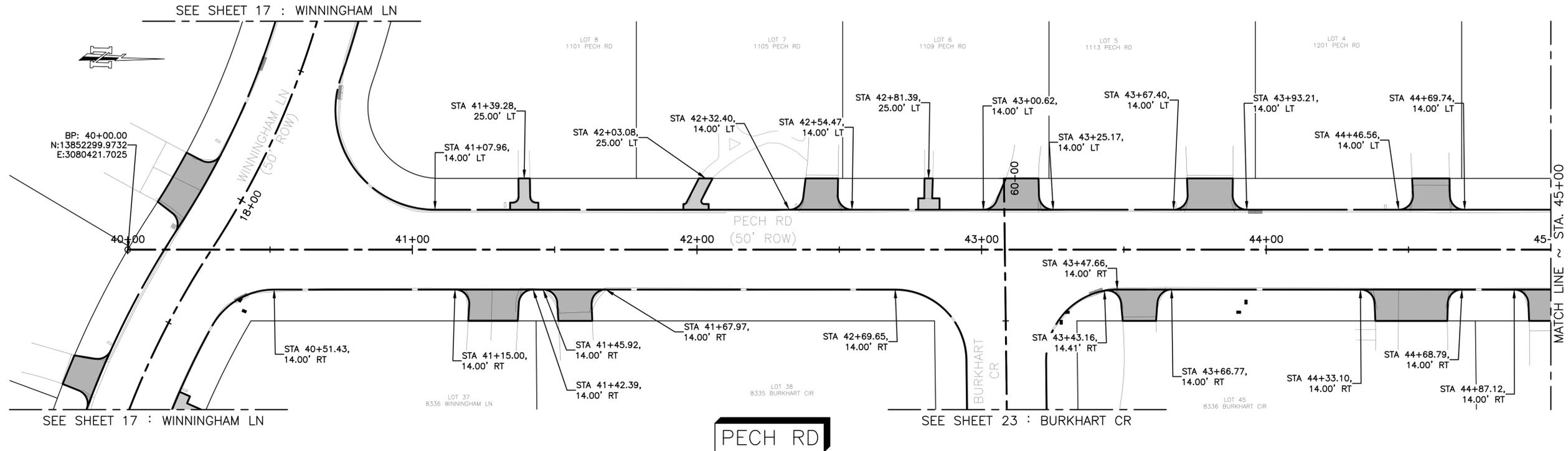
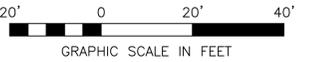
CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

KRIST DR
 GEOMETRIC LAYOUT (5 OF 5)

SUBMITTED: 12/04/23	DESIGNED BY: JMS
SCALE: 1"=20'	DRAWN BY: AA
DATE: 12/04/23	SHEET No.: 20 OF 101
SURVEY BY: CFA	DWG. No.:
F B No.: -	

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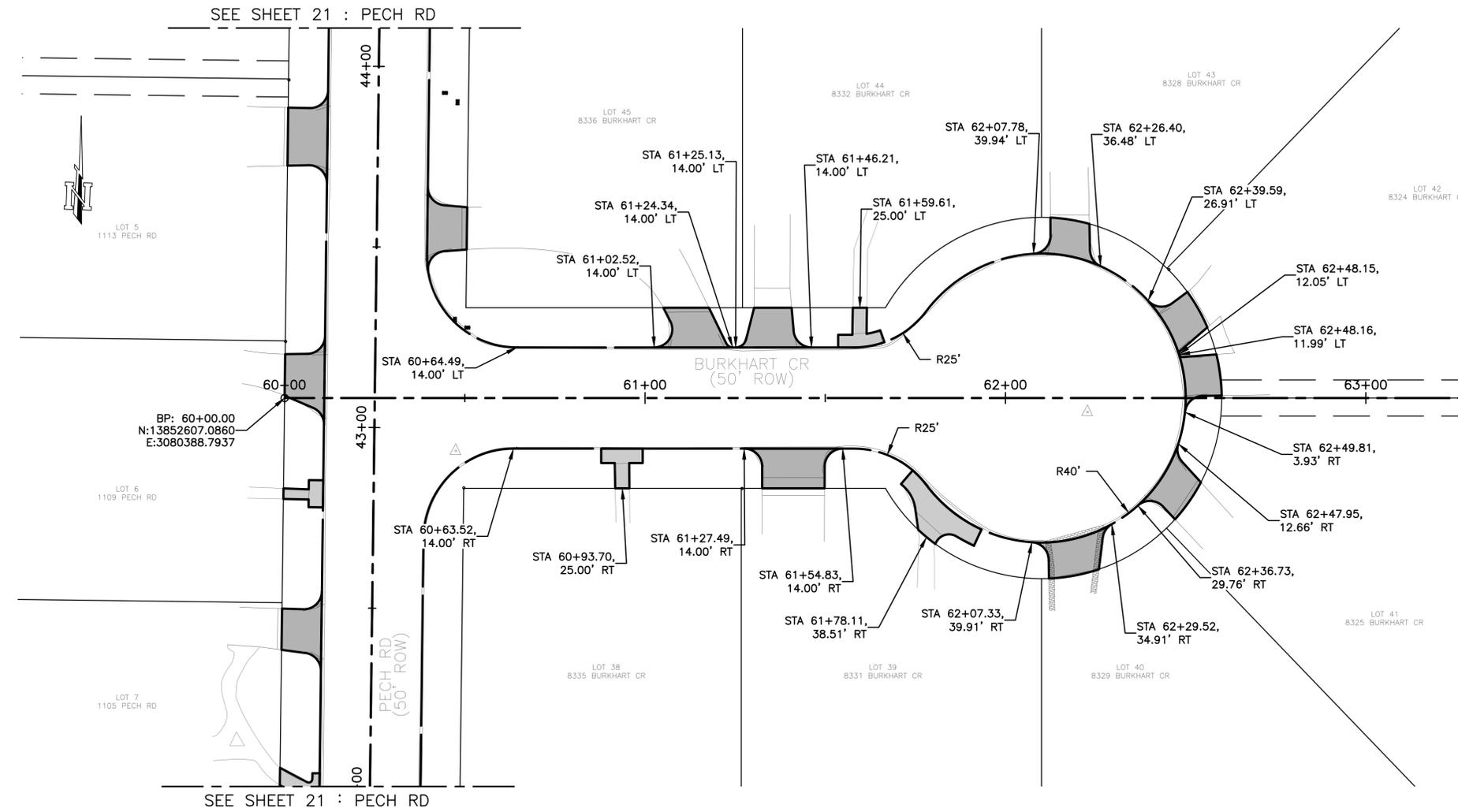
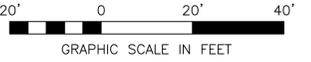
CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

PECH RD & CEDARSPUR ST
 GEOMETRIC LAYOUT (1 OF 2)

SUBMITTED: 12/04/23	DESIGNED BY: VALUE
SCALE: 1"=20'	DRAWN BY: AA
DATE: 12/04/23	SHEET No.: 21 OF 101
SURVEY BY: CFA	DWG. No.:
F B No.: -	

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BURKHART CR

NO.	DATE	REVISIONS



CobbFendley
TBPELS Engineering Firm No. 274
Land Surveying Firm No. 10046700
13430 Northwest Freeway, Suite 1100
Houston, Texas 77040
713.462.3242 | fax 713.462.3262
www.cobbfendley.com

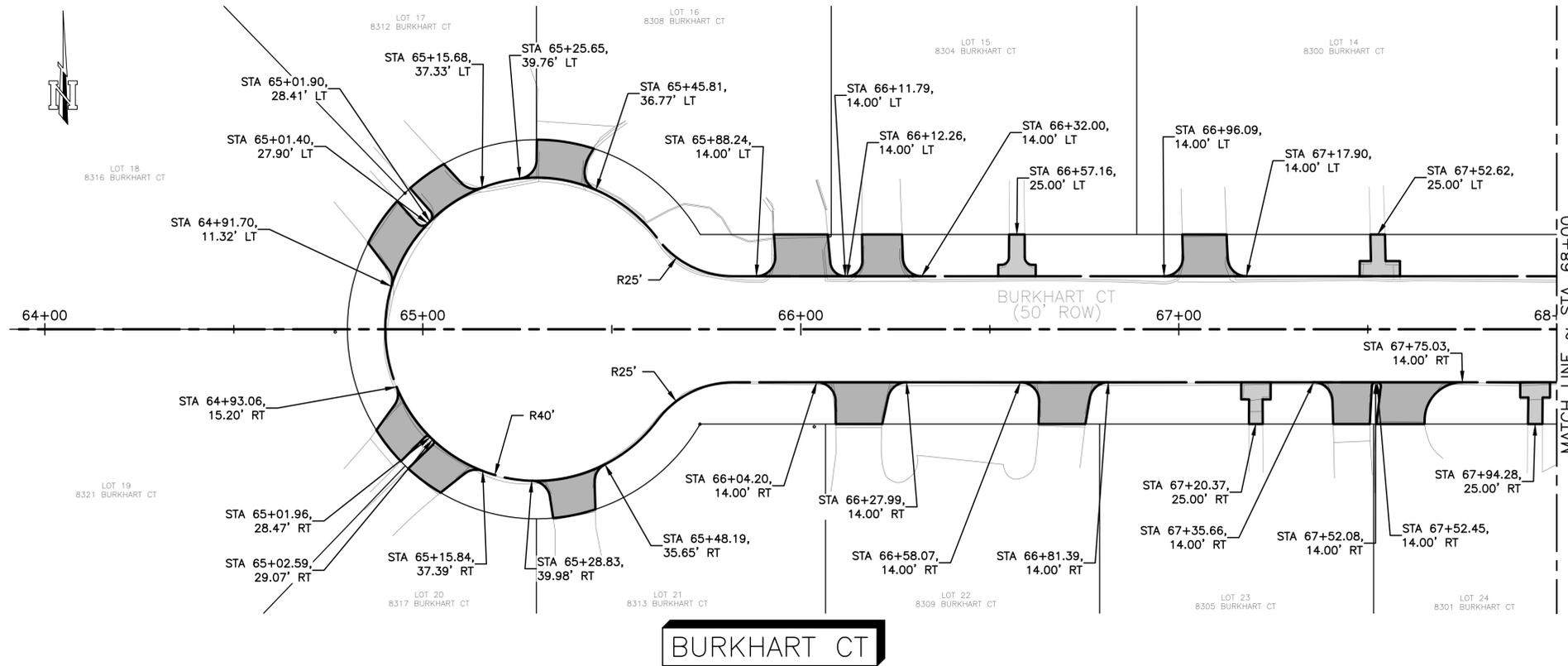
CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

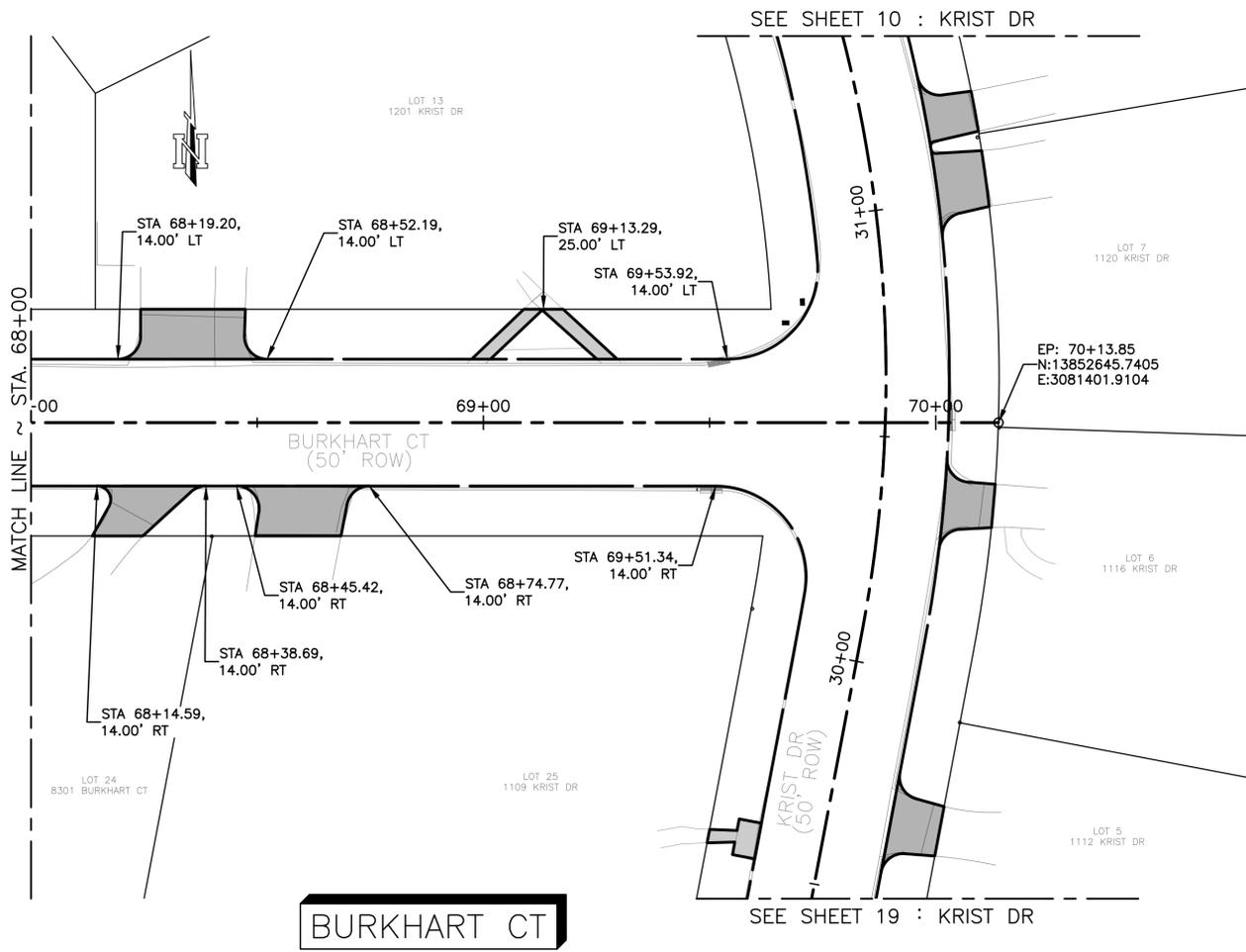
BURKHART CR
GEOMETRIC LAYOUT

SUBMITTED: 12/04/23	DESIGNED BY: JMS
SCALE: 1"=20'	DRAWN BY: AA
DATE: 12/04/23	SHEET No.: 23 OF 101
SURVEY BY: CFA	DWG. No:
F B No.: -	

D:\PROJECTS\2022\12056_CITY_OF_SPRING_VALLEY_VILLAGE\01_BRIGHTON_PLACE_RECONSTRUCTION\400_CAD\412_MUN\ SHEETS\2212-056_GEO_BURKHART_CR.DWG



BURKHART CT



BURKHART CT

NO.	DATE	REVISIONS

CobbFendley
 TBPELS Engineering Firm No. 274
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 13430 Northwest Freeway, Suite 1100
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CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

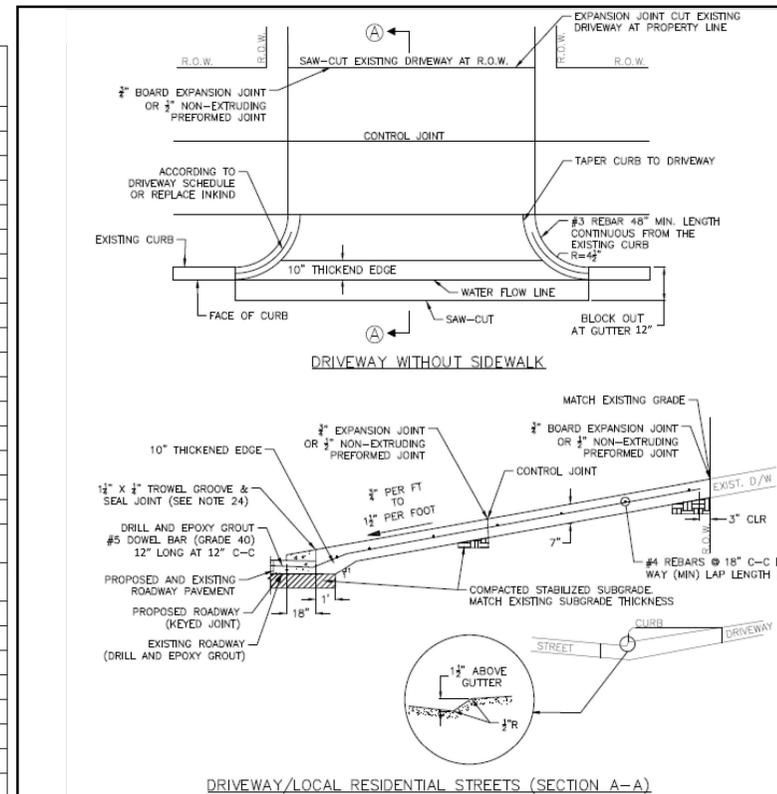
BURKHART CT
 GEOMETRIC LAYOUT

SUBMITTED: 12/04/23	DESIGNED BY: JMS
SCALE: 1"=20'	DRAWN BY: AA
DATE: 12/04/23	SHEET No.: 24 OF 101
SURVEY BY: CFA	DWG. No:
F B No.: -	

D:\PROJECTS\2022\12056_CITY_OF_SPRING_VALLEY_VILLAGE\01_BRIGHTON_PLACE_RECONSTRUCTION\400_CAD\412_MUN\ SHEETS\2212-056_GEO_BURKHART_CT.DWG

WINNINGHAM LANE

DRIVEWAY NO.	CENTER LINE STATION	OFFSET	EXISTING DRIVEWAY MATERIAL	PROPOSED DRIVEWAY	RADIUS (FT)	PROP SY	EXIST GUTTER ELEV (FT)	PROP GUTTER ELEV (FT)	PROP D/W ELEV (FT)	ROW TIE-IN ELEV (FT)	D/W WIDTH (FT)	ROW DEPTH	EXIST D/W DEPTH (FT)	PROP D/W DEPTH (FT)	PROP D/W SLOPE (%)	EXIST D/W SLOPE (%)
1	1+38.84	LT	BROKEN CONC.		5'	17	67.87	67.98	67.98	68.28	11.7	11.4	12.0	11.9	2.5%	3.4%
2	2+16.52	LT	CONCRETE		5'	16	67.59	67.85	67.85	68.10	11.0	11.4	11.3	11.9	2.1%	4.5%
3	2+83.62	LT	BROKEN CONC.		5'	14	67.77	67.65	67.78	68.32	12.2	9.0	10.4	10.0	5.4%	5.3%
4	3+62.61	LT	CONCRETE		5'	30	67.62	67.39	67.72	68.17	23.8	11.0	11.8	11.0	4.1%	4.7%
5	4+40.91	LT	BROKEN CONC.		5'	17	66.92	67.15	67.48	67.80	12.3	11.0	11.9	11.0	2.9%	7.4%
6	5+12.78	LT	CONCRETE		5'	16	66.75	66.94	67.27	67.55	12.1	11.0	11.7	11.0	2.5%	6.8%
7	5+72.46	LT	CONCRETE		5'	15	66.70	66.70	67.03	67.73	10.9	11.0	10.2	11.0	6.4%	10.1%
8	7+65.43	LT	BRICK PAVER		5'	27	66.03	65.75	66.08	67.19	20.3	11.0	12.7	11.0	10.1%	9.1%
9	8+11.93	LT	CONCRETE		5'	14	66.06	65.51	65.84	66.78	11.2	11.0	10.6	11.0	8.5%	6.8%
10	9+03.71	LT	CONCRETE		5'	42	66.16	65.48	65.81	67.19	23.9	11.0	12.9	11.0	12.5%	8.0%
11	9+78.27	LT	CONCRETE		5'	18	65.82	65.71	66.04	67.50	13.0	11.0	11.7	11.0	13.3%	14.4%
12	12+34.34	LT	CONCRETE		5'	26	66.46	66.26	66.59	67.51	19.7	11.0	11.7	11.0	8.4%	9.0%
13	12+74.28	LT	STAMPED CONC.		5'	17	66.43	66.14	66.47	67.27	11.9	11.0	11.7	11.0	7.3%	7.2%
14	13+28.10	LT	STAMPED CONC.		L 3', R 5'	15	66.24	65.97	66.30	67.29	10.2	11.0	11.6	11.0	9.0%	9.1%
15	13+58.42	LT	CONCRETE		5'	16	66.28	65.88	66.21	66.94	11.9	11.0	11.5	11.0	6.6%	5.7%
16	14+47.56	LT	CONCRETE		L 8', R 10'	20	65.78	65.62	65.95	66.79	12.7	11.0	11.6	11.0	7.6%	8.7%
17	15+18.85	LT	CONCRETE		7'	25	65.44	65.37	65.70	66.75	16.6	11.0	11.6	11.0	9.5%	11.3%
18	15+53.15	LT	STONE STAMPED CONC.		5'	16	65.25	65.24	65.57	66.68	12.1	11.0	11.4	11.0	10.1%	12.5%
19	16+26.23	LT	STONE STAMPED CONC.		L 7', R 5'	16	64.93	64.94	65.27	66.27	11.7	11.0	11.5	11.0	9.1%	11.7%
20	16+71.30	LT	EXP. AGG. CONC.		5'	33	64.68	64.66	64.99	66.40	25.6	11.0	12.1	11.0	12.8%	14.2%
21	19+71.96	LT	CONCRETE		5'	16	65.17	65.13	65.46	66.34	11.4	11.0	11.2	11.0	8.0%	10.4%
22	20+91.53	LT	CONCRETE		5'	16	65.55	65.54	65.87	66.34	12.0	11.0	11.4	11.0	4.3%	6.9%
23	21+61.67	LT	CONCRETE		L 5', R 1'	16	65.87	65.75	66.08	66.79	12.1	11.0	11.2	11.0	6.5%	8.2%
24	21+76.14	LT	CONCRETE		L 1', R 5'	18	65.91	65.79	66.12	66.70	12.6	11.0	11.3	11.0	5.3%	7.0%
25	22+48.72	LT	CONCRETE		5'	16	66.16	66.01	66.34	66.56	11.7	11.0	10.9	11.0	2.0%	3.7%
26	23+74.01	LT	CONCRETE		5'	16	66.14	65.91	66.24	66.76	12.2	11.0	11.0	11.0	4.7%	5.6%
27	24+06.89	LT	CONCRETE		5'	16	66.13	65.81	66.14	66.52	11.5	11.0	11.0	11.0	3.5%	3.5%
28	25+21.00	LT	CONCRETE		5'	15	65.85	65.47	65.80	66.52	10.6	11.0	11.2	11.0	6.5%	6.0%
29	25+83.34	LT	STAMPED CONC.		5'	18	65.69	65.29	65.62	66.28	12.8	11.0	11.6	11.0	6.0%	5.1%
30	26+16.82	LT	CONCRETE		5'	29	65.64	65.19	65.52	66.81	22.1	11.0	12.0	11.0	11.7%	9.8%
31	8+21.50	RT	CONCRETE		5'	25	66.15	65.46	65.79	67.06	10.5	11.0	10.5	11.0	11.5%	8.7%
32	8+62.68	RT	CONCRETE		5'	16	66.12	65.37	65.70	67.10	10.8	11.0	10.8	11.0	12.7%	9.1%
33	9+35.16	RT	CONCRETE		5'	13	65.85	65.58	65.91	67.29	9.0	11.0	11.3	11.0	12.5%	12.7%
34	10+03.64	RT	DEC. CONC.		5'	14	65.96	65.78	66.11	67.19	9.2	11.0	11.4	11.0	9.8%	10.8%
35	10+52.34	RT	DEC. CONC.		L 5', R 3'	17	65.99	65.95	66.28	67.16	9.3	11.0	13.7	11.0	8.0%	8.5%
36	11+16.80	RT	EXP. AGG. CONC.		5'	14	66.18	66.12	66.45	67.07	9.9	11.0	11.5	11.0	5.6%	7.7%
37	11+42.80	RT	DEC. CONC.		5'	16	66.28	66.20	66.53	67.12	11.0	11.0	11.5	11.0	5.4%	7.3%
38	12+13.05	RT	CONCRETE		5'	14	66.44	66.32	66.65	67.37	10.1	11.0	11.4	11.0	6.5%	8.2%
39	12+85.73	RT	CONCRETE		5'	17	66.51	66.10	66.43	66.68	12.2	11.0	11.6	11.0	2.3%	1.5%
40	13+53.06	RT	BRICK STAMPED		5'	17	66.22	65.90	66.23	66.61	11.1	11.0	11.6	11.0	3.5%	3.4%
41	14+23.20	RT	CONCRETE		5'	14	65.89	65.69	66.02	67.14	9.9	11.0	11.6	11.0	10.2%	10.8%
42	14+66.57	RT	CONCRETE		5'	17	65.66	65.55	65.88	67.10	11.9	11.0	11.7	11.0	11.1%	12.3%
43	14+92.12	RT	CONCRETE		5'	14	65.46	65.55	65.88	67.10	9.3	11.0	11.6	11.0	11.1%	14.1%
44	15+64.43	RT	CONCRETE		5'	15	65.17	65.20	65.53	66.44	9.4	11.0	11.6	11.0	8.3%	10.9%
45	17+03.70	RT	BROKEN CONC.		5'	14	64.72	64.47	64.80	66.06	9.5	11.0	11.4	11.0	11.5%	11.8%
46	18+05.31	RT	STAMPED CONC.		5'	27	64.55	64.46	64.79	65.98	20.0	11.0	11.0	11.0	10.8%	13.0%
47	18+78.57	RT	CONCRETE		5'	16	64.85	64.91	65.24	66.08	10.8	11.0	12.2	11.0	7.6%	10.1%
48	19+28.80	RT	CONCRETE		5'	23	65.02	65.07	65.40	66.41	17.1	11.0	12.7	11.0	9.2%	10.9%
49	19+56.29	RT	CONCRETE		5'	15	65.14	65.16	65.49	66.20	11.0	11.0	12.5	11.0	6.5%	8.5%
50	20+05.24	RT	CONCRETE		5'	13	65.35	65.32	65.65	66.44	12.5	11.0	12.2	11.0	7.2%	8.9%
51	20+79.77	RT	CONCRETE		5'	17	65.64	65.57	65.90	66.52	12.3	11.0	12.1	11.0	5.6%	7.3%
52	21+46.65	RT	CONCRETE		5'	19	66.13	65.78	66.11	66.56	14.3	11.0	11.9	11.0	4.1%	3.6%
53	22+13.85	RT	CONCRETE		5'	15	66.00	66.00	66.33	66.85	10.9	11.0	12.0	11.0	4.7%	7.1%
54	22+64.85	RT	CONCRETE		5'	16	66.28	66.17	66.50	67.19	11.9	11.0	12.0	11.0	6.3%	7.6%
55	22+87.44	RT	CONCRETE		L 5', R 4'	19	66.41	66.25	66.58	67.05	12.4	11.0	12.0	11.0	4.3%	5.3%
56	23+56.59	RT	CONCRETE		4'	14	66.21	66.18	66.51	66.81	9.8	11.0	12.2	11.0	2.7%	4.9%
57	24+23.10	RT	CONCRETE		5'	14	65.98	65.98	66.31	66.57	10.1	11.0	11.6	11.0	2.4%	5.1%
58	25+51.32	RT	CONCRETE		L 2', R 5'	14	65.69	65.60	65.93	66.33	10.0	11.0	11.8	11.0	3.6%	5.4%
59	25+66.33	RT	BROKEN CONC.		L 5', R 2'	17	65.71	65.55	65.88	66.48	12.4	11.0	11.7	11.0	5.5%	6.6%
60	26+36.98	RT	EXP. AGG. CONC.		5'	15	65.67	65.34	65.67	66.37	9.5	11.0	11.7	11.0	6.4%	6.0%
61	26+78.42	RT	EXP. AGG. CONC.		5'	15	65.52	65.37	65.70	66.47	9.8	11.0	12.4	11.0	7.0%	7.7%
62	27+10.80	RT	CONCRETE		L 3', R 5'	19	65.25	65.48	65.81	66.47	10.7	11.0	15.6	11.0	6.0%	7.8%
63	27+26.08	RT	EXP. AGG. CONC.		3'	21	65.27	65.53	65.86	66.19	13.4	11.0	15.2	11.0	3.0%	6.1%
64	27+41.43	RT	EXP. AGG. CONC.		L 5', R 3'	21	65.40	65.58	65.91	66.33	13.2	11.0	15.0	11.0	3.8%	6.2%



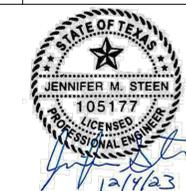


RESIDENTIAL DRIVEWAY WITHOUT SIDEWALK DETAIL
DETAIL ST - 4

- NOTES:**
- NO CONCRETE SHALL BE PLACED UNTIL FORMS AND SUBGRADE ARE INSPECTED.
 - ALL DISTURBED SUBGRADE MUST BE TREATED TO DEPTH OF STABILIZATION REQUIREMENTS PER GEO REPORT NOTES AND SPECIFICATIONS.
 - SAW CUT OPERATIONS SHALL BEGIN AS SOON AS POSSIBLE AFTER CONCRETE PLACEMENT.
 - SAW CUT EXISTING DRIVES AT R.O.W. UNLESS OTHERWISE INSTRUCTED BY THE CITY ENGINEER OR CITY
 - SEAL ALL SAW CUT CONTROL POINTS WITH SELF-SEALING NON-SAG JOINT SEALANT MATERIAL.
 - METER BOXES OR CLEANOUTS SHALL NOT BE LOCATED WITHIN DRIVEWAYS.
 - REFER TO EXPANSION JOINT DETAIL FOR SPACING.
 - THE SIDEWALK CROSS SLOPE APPLIES TO THE DRIVEWAY INLINE WITH THE SIDEWALK CROSSING THE DRIVE. (ON THOROUGHFARES AND COLLECTORS ONLY).

- NOTES:**
- CONTRACTOR TO REPLACE ALL DRIVEWAYS WITH STANDARD CONCRETE.
 - DRIVEWAYS LABELED WITH "N" UNDER THE PROPOSED DRIVEWAY WILL BE INSTALLED BY THE PROPERTY OWNER AND ARE NOT INCLUDED IN THIS PROJECT.
 - INSPECTOR MAY FIELD ADJUST DRIVEWAY REPLACEMENT TO MATCH EXISTING JOINTS.

NO.	DATE	REVISIONS


CobbFendley
 TBPELS Engineering Firm No. 274
 Land Surveying Firm No. 10046700
 13430 Northwest Freeway, Suite 1100
 Houston, Texas 77040
 713.462.3242 | fax 713.462.3262
 www.cobbhendley.com

CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

DRIVEWAY SUMMARY
(1 OF 2)

SUBMITTED: 12/04/23	DESIGNED BY: JMS
SCALE: N/A	DRAWN BY: AA
DATE: 12/04/23	SHEET No.: 25 OF 101
SURVEY BY: CFA	DWG. No.:
F B No.: -	

D:\PROJECTS\2022\12056_CITY_OF_SPRING_VALLEY_VILLAGE\01_BRIGHTON_PLACE_RECONSTRUCTION\400_CAD\412_MUN\SUMMARY.DWG

	DRIVEWAY NO.	CENTER LINE STATION	OFFSET	EXISTING DRIVEWAY MATERIAL	PROPOSED DRIVEWAY	RADIUS (FT)	PROP SY	EXIST GUTTER ELEV (FT)	PROP GUTTER ELEV (FT)	PROP D/W ELEV (FT)	ROW TIE-IN ELEV (FT)	D/W WIDTH (FT)	ROW DEPTH	EXIST D/W DEPTH (FT)	PROP D/W DEPTH (FT)	PROP D/W SLOPE (%)	EXIST D/W SLOPE (%)
KRIST DRIVE	65	29+06.68	LT	CONCRETE		5'	16	65.47	65.96	66.29	66.78	11.4	11.0	11.3	11.0	4.5%	11.6%
	66	32+96.77	LT	CONCRETE		5'	18	65.78	65.35	65.68	66.57	12.3	11.0	11.2	11.0	8.1%	7.1%
	67	33+86.18	LT	CONCRETE		5'	17	65.37	65.09	65.42	66.49	11.8	11.0	12.1	11.0	9.7%	9.3%
	68	34+08.10	LT	CONCRETE		5'	12	65.42	65.02	65.35	66.20	8.7	11.0	11.4	11.0	7.7%	6.8%
	69	35+80.55	LT	CONCRETE		5'	26	65.53	65.55	65.88	66.53	19.4	11.0	9.2	11.0	5.9%	10.9%
	70	27+60.31	RT	CONCRETE		5'	18	65.22	65.65	65.98	66.31	11.8	11.0	13.7	11.0	3.0%	8.0%
	71	27+98.29	RT	CONCRETE W/ BRICK EDGE		5'	26	65.43	65.78	66.11	66.93	19.8	11.0	12.2	11.0	7.5%	12.3%
	72	28+57.18	RT	CONCRETE		5'	17	65.66	65.99	66.32	67.13	12.0	11.0	12.2	11.0	7.4%	12.0%
	73	29+10.77	RT	CONCRETE		5'	19	65.79	65.94	66.27	67.56	15.1	11.0	12.3	11.0	11.7%	14.4%
	74	29+66.58	RT	CONCRETE		5'	16	65.50	65.63	65.96	66.48	11.1	11.0	12.1	11.0	4.7%	8.1%
	75	30+36.87	RT	CONCRETE		5'	14	65.17	65.47	65.80	66.54	9.6	11.0	11.4	11.0	6.7%	12.0%
	76	31+03.71	RT	STAMPED CONC.		L 1', R 5'	17	65.52	65.67	66.00	66.49	12.4	11.0	11.8	11.0	4.5%	8.2%
	77	31+17.57	RT	STAMPED CONC.		L 5', R 1'	13	65.45	65.71	66.04	66.34	9.0	11.0	12.2	11.0	2.7%	7.3%
	78	31+66.59	RT	STAMPED CONC.		5'	13	65.79	65.74	66.07	66.46	9.1	11.0	12.3	11.0	3.5%	5.4%
	79	31+85.70	RT	CONCRETE		L 5', R 4'	18	65.75	65.68	66.01	66.49	13.0	11.0	12.4	11.0	4.4%	6.0%
PECH ROAD	80	32+24.98	RT	CONCRETE		5'	19	65.83	65.57	65.90	66.53	14.3	11.0	11.6	11.0	5.7%	6.0%
	81	32+83.41	RT	CONCRETE		L 4', R 5'	15	65.79	65.39	65.72	66.45	11.2	11.0	11.8	11.0	6.6%	5.6%
	82	33+02.78	RT	CONCRETE		L 5', R 4'	17	65.76	65.33	65.66	66.71	13.7	11.0	12.4	11.0	9.5%	7.7%
	83	33+45.06	RT	CONCRETE		5'	16	65.60	65.21	65.54	66.70	14.1	11.0	12.2	11.0	10.5%	9.0%
	84	34+30.06	RT	EXP. AGG. CONC.		5'	16	65.17	64.95	65.28	66.48	10.9	11.0	12.3	11.0	10.9%	10.7%
	85	34+71.26	RT	BROKEN CONC.		5'	26	65.11	65.05	65.38	66.77	19.6	11.0	12.8	11.0	12.6%	13.0%
	86	42+43.87	LT	CONCRETE		5'	16	65.15	65.23	65.56	65.89	11.4	11.0	11.9	11.0	3.0%	6.2%
	87	43+14.26	LT	CONCRETE		5'	18	65.33	65.44	65.77	66.16	11.5	11.0	12.2	11.0	3.5%	6.8%
	88	43+80.23	LT	CONCRETE		5'	21	65.42	65.64	65.97	66.25	16.1	11.0	11.8	11.0	2.5%	7.0%
	89	44+57.84	LT	CONCRETE		5'	18	65.80	65.87	66.20	66.60	13.1	11.0	11.9	11.0	3.6%	6.7%
	90	45+24.24	LT	CONCRETE		5'	16	65.93	66.07	66.40	67.01	11.6	11.0	11.8	11.0	5.5%	9.2%
	91	46+00.36	LT	CONCRETE		L 5', R 3'	17	66.12	66.33	66.66	67.15	14.4	11.0	13.1	11.0	4.5%	7.9%
	92	46+27+27	LT	CONCRETE		L 5', R 3'	15	66.68	66.71	67.04	67.61	12.1	11.0	10.7	11.0	5.2%	8.7%
	93	41+28.34	RT	CONCRETE		5'	23	64.97	64.88	65.21	66.52	17.4	11.0	11.3	11.0	11.9%	13.7%
	94	41+57.26	RT	CONCRETE		5'	16	64.97	64.97	65.30	66.23	11.9	11.0	11.4	11.0	8.5%	11.1%
95	43+55.45	RT	CONCRETE		5'	17	65.38	65.67	66.00	66.19	11.7	11.0	11.6	11.0	1.7%	7.0%	
96	44+50.99	RT	CONCRETE		5'	33	65.69	65.85	66.18	67.02	25.3	11.0	11.4	11.0	7.6%	11.7%	
97	45+07.37	RT	BROKEN CONC.		5'	39	65.92	66.02	66.35	67.04	30.0	11.0	11.4	11.0	6.3%	9.8%	
CEDARS PUR STREET	98	46+33.78	LT	CONCRETE		L 3', R 5'	15	66.71	66.81	67.14	67.44	11.9	11.0	10.8	11.0	2.7%	6.8%
	99	46+45.91	LT	CONCRETE		5'	14	66.37	66.59	66.92	67.56	12.0	11.0	10.5	11.0	5.8%	11.3%
	100	47+42.12	LT	CONCRETE W/ BRICK EDGE		L 5', R 4'	16	65.96	65.89	66.22	67.10	12.0	11.0	11.9	11.0	8.0%	9.6%
	101	47+64.68	LT	CONCRETE		L 4', R 4'	18	65.88	65.82	66.15	67.03	11.7	11.0	12.1	11.0	8.0%	9.5%
	102	47+93.80	LT	CONCRETE		5'	20	65.74	65.75	66.08	67.22	12.6	11.0	12.2	11.0	10.4%	12.1%
	103	48+32.85	LT	CONCRETE		5'	23	65.67	65.62	65.95	67.01	17.3	11.0	11.7	11.0	9.6%	11.5%
	104	49+04.77	LT	CONCRETE		5'	17	65.50	65.40	65.73	66.42	11.9	11.0	11.7	11.0	6.3%	7.9%
	105	49+81.24	LT	STAMPED CONC.		5'	29	65.28	65.17	65.50	66.62	21.9	11.0	11.7	11.0	10.2%	11.5%
	106	51+04.47	LT	CONCRETE		5'	19	64.92	64.80	65.13	65.72	12.9	11.0	11.7	11.0	5.4%	6.8%
	107	51+73.58	LT	CONCRETE		5'	18	64.85	64.59	64.92	66.21	13.2	11.0	11.7	11.0	11.7%	11.6%
	108	47+36.65	RT	CONCRETE		5'	14	65.90	65.90	66.23	67.02	9.3	11.0	11.5	11.0	7.2%	9.7%
	109	48+08.76	RT	CONCRETE		5'	17	65.68	65.69	66.02	66.95	11.6	11.0	11.5	11.0	8.5%	11.0%
	110	48+74.07	RT	CONCRETE		5'	22	65.47	65.49	65.82	66.38	16.8	11.0	11.6	11.0	5.1%	7.8%
	111	49+99.37	RT	EXP. AGG. CONC.		5'	17	65.15	65.11	65.44	66.34	13.0	11.0	11.7	11.0	8.2%	10.2%
	112	50+58.76	RT	CONCRETE		5'	21	65.12	64.94	65.27	66.29	15.8	11.0	11.5	11.0	9.3%	10.2%
113	51+39.73	RT	CONCRETE		L 1', R 5'	13	64.78	64.69	65.02	65.93	8.9	11.0	11.5	11.0	8.3%	10.0%	
114	51+51.83	RT	CONCRETE		L 5', R 1'	9	64.88	64.66	64.99	65.93	9.1	11.0	11.1	11.0	8.5%	9.5%	
115	52+79.54	RT	BROKEN CONC.		5'	15	64.38	64.41	64.74	65.98	9.9	11.0	11.7	11.0	11.3%	13.7%	

	DRIVEWAY NO.	CENTER LINE STATION	OFFSET	EXISTING DRIVEWAY MATERIAL	PROPOSED DRIVEWAY	RADIUS (FT)	PROP SY	EXIST GUTTER ELEV (FT)	PROP GUTTER ELEV (FT)	PROP D/W ELEV (FT)	ROW TIE-IN ELEV (FT)	D/W WIDTH (FT)	ROW DEPTH	EXIST D/W DEPTH (FT)	PROP D/W DEPTH (FT)	PROP D/W SLOPE (%)	EXIST D/W SLOPE (%)
BURKHART CIRCLE	116	61+11.41	LT	CONCRETE		L 5', R 2'	18	65.83	65.48	65.81	66.33	11.4	11.0	12.0	11.0	4.7%	4.2%
	117	61+35.47	LT	CONCRETE		L 3', R 5'	16	65.91	65.64	65.97	66.53	10.4	11.0	11.8	11.0	5.1%	5.3%
	118	62+17.93	LT	CONCRETE		5'	14	66.35	66.23	66.56	66.87	10.8	10.4	10.3	10.4	3.0%	5.0%
	119	62+53.51	LT	CONCRETE		L 5', R 1'	14	66.55	66.41	66.74	67.17	11.3	10.3	10.8	10.3	4.2%	5.7%
	120	62+59.59	LT	CONCRETE		L 1', R 5'	13	66.56	66.47	66.80	67.17	11.5	10.3	10.9	10.3	3.6%	5.6%
	121	61+41.15	RT	CONCRETE		5'	23	66.05	65.67	66.00	66.65	17.3	11.0	11.5	11.0	5.9%	5.2%
	122	62+19.09	RT	CONCRETE W/ BRICK EDGE		5'	18	66.20	66.26	66.59	66.93	13.9	10.1	11.8	10.1	3.4%	6.2%
	123	62+50.96	RT	CONCRETE		5'	15	66.51	66.39	66.72	66.94	10.6	10.6	10.6	10.6	2.1%	4.1%
	124	64+89.01	LT	CONCRETE		L 5', R 2'	16	66.15	66.31	66.64	67.13	12.9	11.0	12.6	10.0	4.9%	7.8%
	125	65+00.94	LT	STAMPED CONC.		L 2', R 5'	13	66.16	66.20	66.53	67.16	10.9	11.0	10.4	10.0	6.3%	9.6%
BURKHART COURT	126	65+37.78	LT	CONCRETE		5'	16	65.79	66.00	66.33	67.18	15.2	11.0	11.1	10.0	8.5%	12.5%
	127	66+00.02	LT	CONCRETE		L 5', R 4'	19	65.73	65.58	65.91	67.13	14.2	11.0	12.4	11.0	11.1%	11.3%
	128	66+21.49	LT	CONCRETE		L 4', R 5'	15	65.67	65.52	65.85	66.79	10.6	11.0	12.4	11.0	8.5%	9.0%
	129	67+06.79	LT	BROKEN CONC.		5'	16	65.51	65.61	65.94	66.55	11.7	11.0	12.5	11.0	5.5%	8.3%
	130	68+35.81	LT	CONCRETE		5'	30	65.15	65.50	65.83	66.93	23.2	11.0	12.6	11.0	10.0%	14.1%
	131	64+90.75	RT	CONCRETE		L 1', R 5'	13	66.31	66.28	66.61	66.87	10.4	11.0	9.1	10.0	2.6%	6.2%
	132	65+00.02	RT	CONCRETE		L 5', R 1'	13	66.19	66.20	66.53	66.73	10.4	11.0	9.8	10.0	2.0%	5.5%
	133	65+40.14	RT	CONCRETE		5'	15	66.13	65.99	66.32	66.93	11.4	11.0	10.3	10.0	6.1%	7.8%
	134	66+15.41	RT	CONCRETE		5'	18	65.68	65.54	65.87	67.30	12.3	11.0	10.9	11.0	13.0%	14.9%
	135	66+69.09	RT	CONCRETE		5'	18	65.63	65.50	65.83	67.10	12.4	11.0	10.7	11.0	11.5%	13.7%
	136	67+45.69	RT	CONCRETE		L 1', R 5'	13	65.67	65.72	66.05	67.16	9.7	11.0	10.8	11.0	10.1%	13.8%
	137	67+58.65	RT	CONCRETE		L 10', R 1'	18	65.42	65.76	66.09	67.20	12.7	11.0	11.0	11.0	10.1%	16.2%
	138	68+19.12	RT	EXP. AGG. CONC.		L 5', R 3'	18	65.22	65.54	65.87	66.73	8.5	11.0	13.4	11.0	7.8%	11.3%
	139	68+59.03	RT	CONCRETE		5'	25	65.13	65.40	65.73	66.69	19.0	11.0	10.8	11.0	8.7%	14.4%

NOTES:

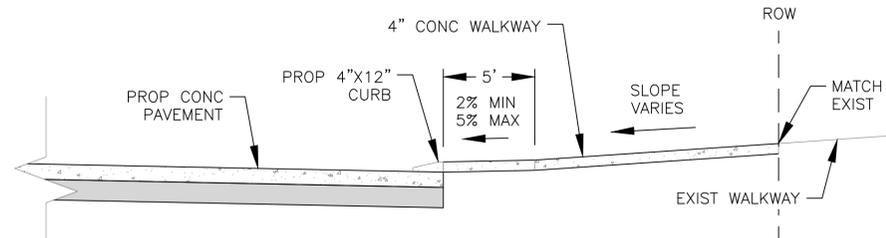
- CONTRACTOR TO REPLACE ALL DRIVEWAYS WITH STANDARD CONCRETE.
- DRIVEWAYS LABELED WITH "N" UNDER THE PROPOSED DRIVEWAY WILL BE INSTALLED BY THE PROPERTY OWNER AND ARE NOT INCLUDED IN THIS PROJECT.
- INSPECTOR MAY FIELD ADJUST DRIVEWAY REPLACEMENT TO MATCH EXISTING JOINTS.

NO.	DATE	REVISIONS

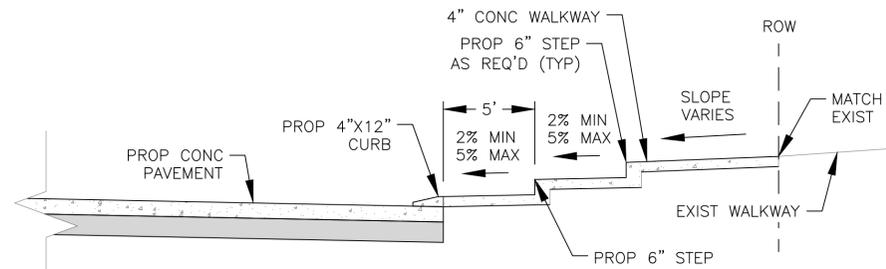


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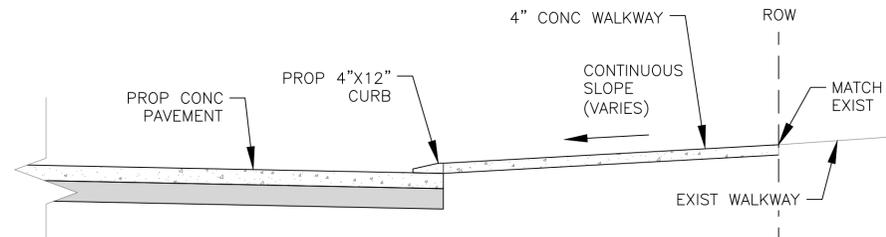
	WALKWAY NO.	STATION	OFFSET	STEPS	EXIST W/W SLOPE (%)	PROP WALKWAY	EXIST WALKWAY MATERIAL
WINNINGHAM LANE	1	2+61.04	LT	N	3.0%		CONCRETE
	2	3+43.70	LT	N	2.0%		CONC SLAB W/ GRAVEL
	3	4+14.50	LT	N	4.0%		CONCRETE
	4	4+90.49	LT	N	6.0%		CONC SLAB W/ GRAVEL
	5	6+80.54	LT	N	3.5%		BRICK
	6	8+46.85	LT	N	4.0%		CONCRETE
	7	10+08.00	LT	Y	8.0%		CONC W/ BRICK
	8	11+95.18	LT	N	3.5%		CONC SLAB W/ GRAVEL
	9	18+75.57	LT	N	9.0%		EXP AGG CONC
	10	22+10.28	LT	N	6.0%		CONCRETE
	11	22+82.86	LT	N	4.0%		CONCRETE
	12	23+48.01	LT	N	4.0%		EXP AGG CONC
	13	24+81.54	LT	N	7.0%		EXP AGG CONC
	14	25+31.65	LT	N	6.0%		EXP AGG CONC
	15	7+63.15	RT	N	7.0%		CONCRETE
	16	8+88.39	RT	N	11.0%		DECORATIVE CONC
	17	9+67.10	RT	Y	1.5%		CONC SLAB W/ GRAVEL
	18	11+65.50	RT	N	5.0%		DECORATIVE CONC
	19	12+34.74	RT	N	4.0%		CONC W/ BRICK
	20	13+88.94	RT	N	3.0%		CONC SLAB W/ GRAVEL
	21	15+15.17	RT	N	11.0%		CONCRETE
	22	15+93.07	RT	N	11.0%		CONCRETE
	23	20+34.67	RT	N	8.0%		CONCRETE
	24	21+00.19	RT	N	5.0%		EXP AGG CONC
	25	22+38.41	RT	N	7.0%		CONCRETE
	26	23+21.78	RT	N	5.0%		STAMPED CONC
	27	23+85.20	RT	N	3.0%		CONCRETE
	28	24+50.34	RT	N	3.0%		CONCRETE
	29	25+14.63	RT	N	6.0%		CONCRETE
	30	26+27.30	RT	N	5.0%		BRICK
KRIST DRIVE	31	27+82.83	LT	N	15.0%		CONCRETE
	32	28+73.74	LT	N	10.0%		STAMPED CONC
	33	29+56.02	LT	N	10.0%		CONCRETE
	34	32+36.67	LT	N	4.0%		CONCRETE
	35	32+55.09	RT	N	5.0%		CONCRETE
	36	33+80.51	RT	N	10.0%		EXP AGG CONC
PECH ROAD	37	35+15.97	RT	N	10.0%		BRICK
	38	41+39.28	LT	N	11.0%		BRICK
	39	42+03.08	LT	N	5.0%		TILE
	40	42+81.39	LT	N	5.0%		CONCRETE
CEDARS PUR STREET	41	50+00.55	LT	N	4.0%		BRICK
	42	50+71.17	LT	N	4.0%		TILE
	43	51+43.19	LT	N	5.0%		CONCRETE
	44	52+24.31	LT	N	11.0%		EXP AGG CONC
	45	47+00.78	RT	N	13.0%		EXP AGG CONC
	46	47+62.82	RT	N	7.0%		EXP AGG CONC
	47	51+21.79	RT	N	7.0%		STAMPED CONC
	48	51+81.87	RT	N	13.0%		EXP AGG CONC
	49	52+44.19	RT	N	16.0%		EXP AGG CONC
	50	53+45.09	RT	N	14.0%		EXP AGG CONC
BURKHART T CIRCLE	51	61+59.61	LT	N	3.0%		CONCRETE
	52	60+93.70	RT	N	2.0%		CONCRETE
	53	61+78.11	RT	N	2.0%		CONCRETE
BURKHART COURT	54	66+57.16	LT	N	3.0%		TILE
	55	67+52.62	LT	N	10.0%		STONE
	56	69+13.29	LT	N	7.0%		CONCRETE
	57	69+13.29	LT	N	7.0%		CONCRETE
	58	67+20.37	RT	N	13.0%		CONCRETE
	59	67+94.28	RT	N	15.0%		CONCRETE



WALKWAY DETAIL - A



WALKWAY DETAIL - B



WALKWAY DETAIL - C

- LEGEND**
-  PROP CONC PAVEMENT
 - PROP 6" SUBGRADE

NOTES:

1. WALKWAY DETAIL MATCHES EXISTING CONDITIONS. SLOPES, NUMBER OF STEPS, SIZE OF WALKWAY IS APPROXIMATE. CONTRACTOR TO MATCH EXISTING SIZE AND SHAPE.
2. WALKWAY TO BE REPLACED WITH STANDARD CONCRETE.
3. WALKWAY LABELED "N" UNDER PROPOSED WALKWAY, TO BE CONSTRUCTED BY THE PROPERTY OWNER.
4. INSPECTOR MAY FIELD ADJUST WALKWAY REPLACEMENT TO MATCH EXISTING JOINTS.

NO.	DATE	REVISIONS



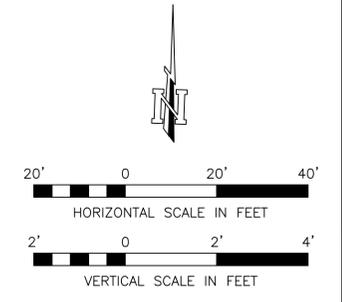
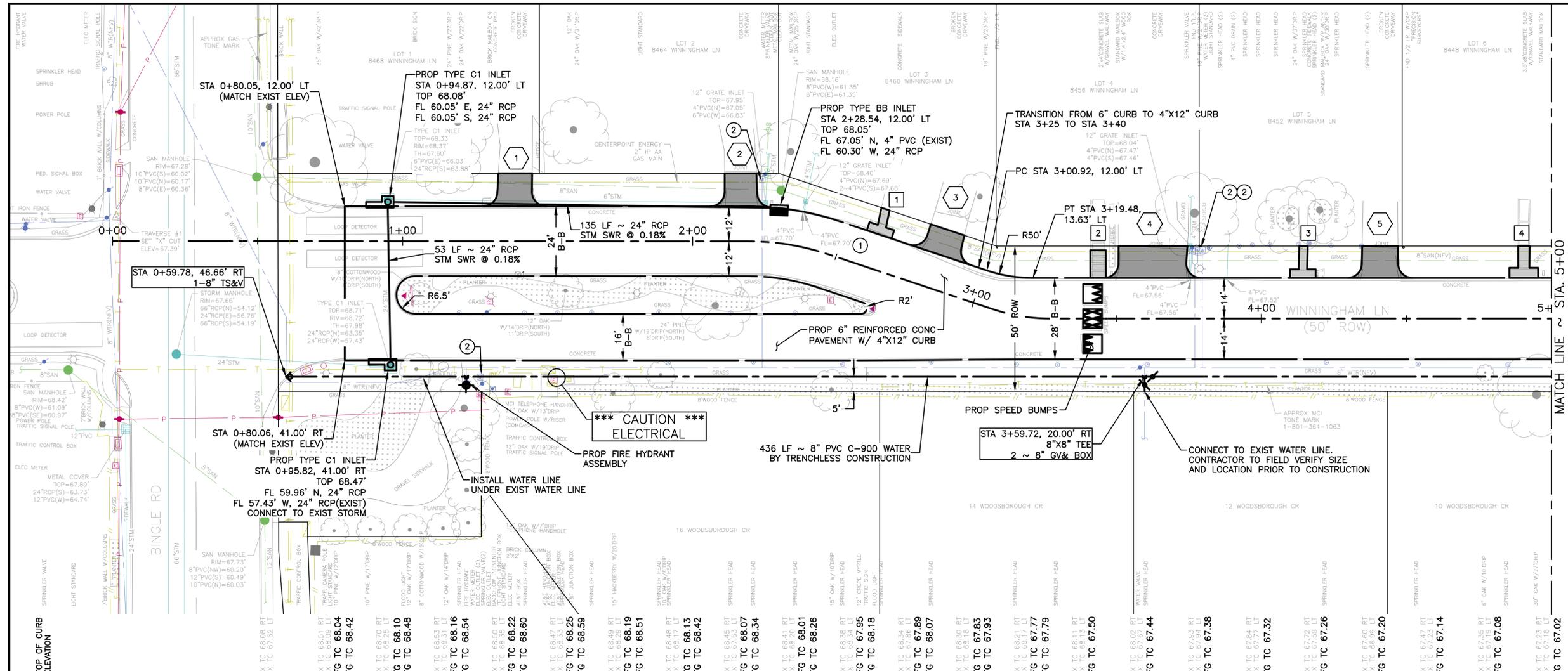
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CITY OF SPRING VALLEY VILLAGE

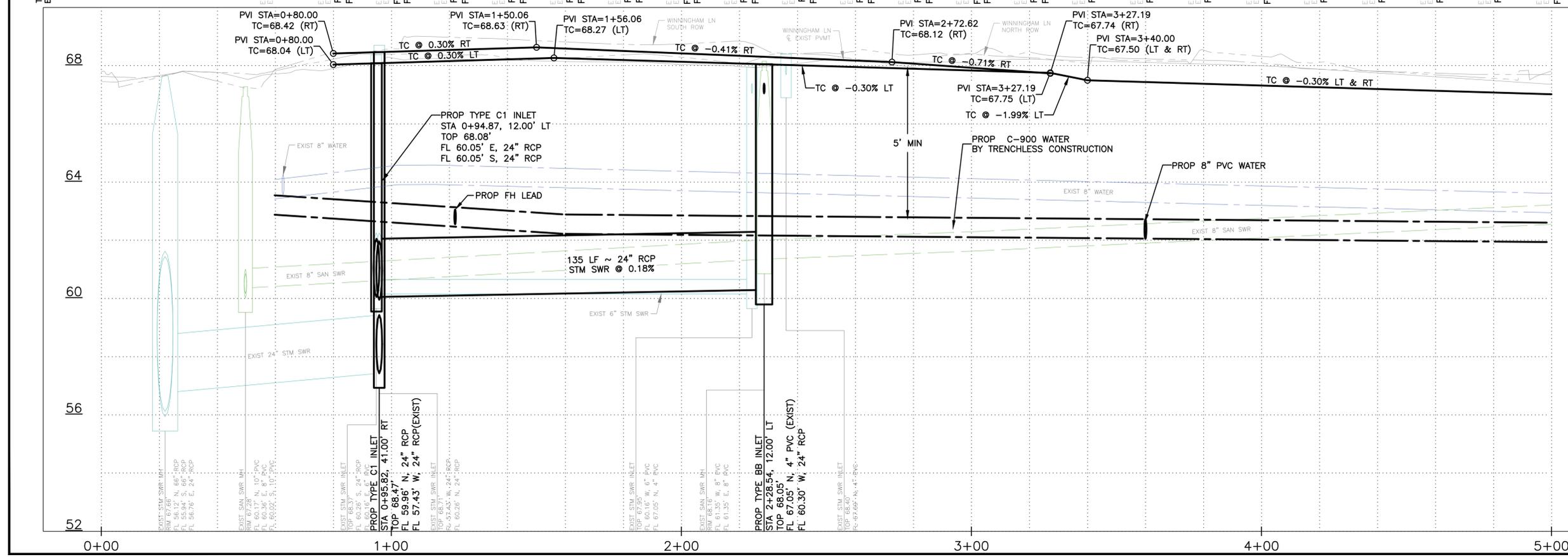
BRIGHTON PLACE RECONSTRUCTION

WALKWAY SUMMARY

SUBMITTED: 12/04/23	DESIGNED BY: JMS
SCALE: N/A	DRAWN BY: AA
DATE: 12/04/23	SHEET No.: 27 OF 101
SURVEY BY: CFA	DWG. No.:
F B No.: -	



- LEGEND**
- PROP DRIVEWAY
 - PROP SIDEWALK
 - ① YARD DRAIN, SEE NOTE 1.
 - ② INSTALL 1" SINGLE SERVICE WATER LINE OR 2" WITH A "Y" FOR TWO WATER METERS
 - ③ FIELD VERIFY UTILITY LOCATION, INSTALL WATER LINE UNDER UTILITY
 - Ⓜ DRIVEWAY (SEE SHEET 25-26 FOR DRIVEWAY SUMMARY TABLE)
 - Ⓜ WALKWAY (SEE SHEET 27 FOR WALKWAY SUMMARY TABLE)
- NOTES:**
- REMOVE AND REPLACE YARD DRAIN, SIZE VARIES, SEE DETAIL SHEET 74. CONTRACTOR TO FIELD VERIFY ALL LOCATIONS.
 - SANITARY SEWER, FIBER, TELEPHONE, AND GAS LINES ARE SHOWN PER OWNER PROVIDED DRAWINGS AND BASED ON FIELD LOCATIONS. LOCATIONS SHOWN ARE APPROXIMATE. CONTRACTOR TO FIELD VERIFY LOCATION.
 - ALL PROPOSED WATER SERVICE LINES TO BE INSTALLED OVER THE EXISTING SANITARY SEWER.



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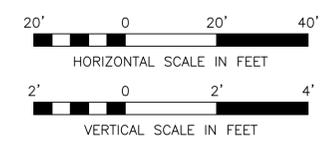
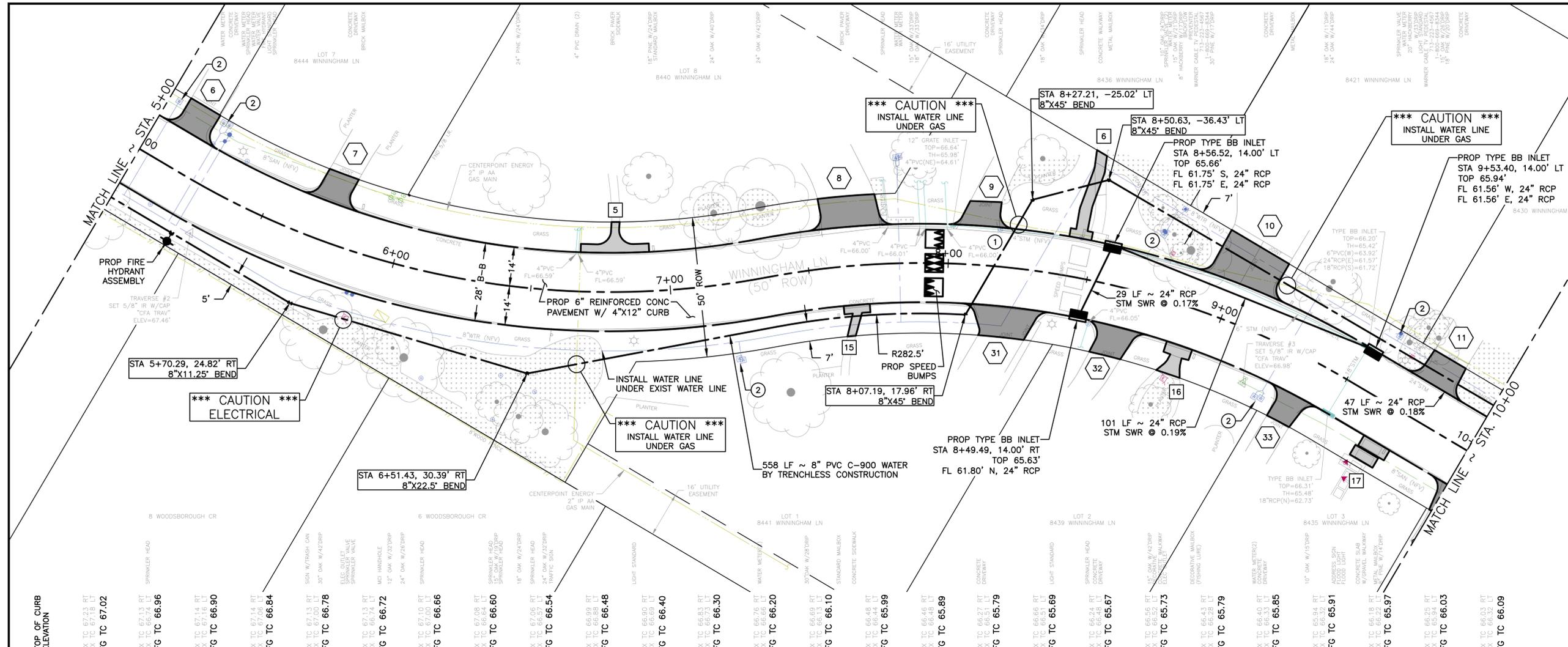
CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

WINNINGHAM LN
 PLAN & PROFILE
 STA 0+00 TO STA STA 5+00

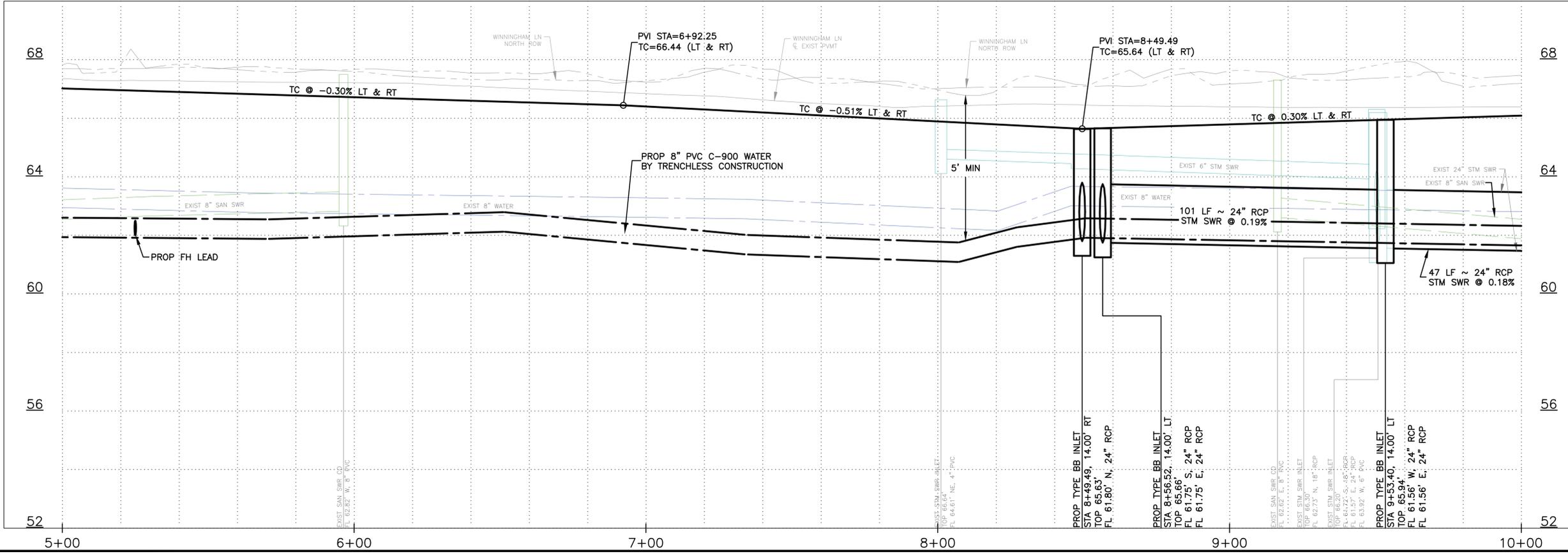
SUBMITTED: 12/04/23	DESIGNED BY: JMS
SCALE: 1"=20'	DRAWN BY: AA
DATE: 12/04/23	SHEET No.: 28 OF 101
SURVEY BY: CFA	DWG. No.:
F B No.: -	

D:\PROJECTS\2022\12056_CITY_OF_SPRING_VALLEY_VILLAGE\01_BRIGHTON_PLACE_RECONSTRUCTION\400_CAD\12_MUN\SHEETS\2212-056_PP_WINNINGHAM-KRISTI.DWG



- LEGEND**
- PROP DRIVEWAY
 - PROP SIDEWALK
 - ① YARD DRAIN, SEE NOTE 1.
 - ② INSTALL 1" SINGLE SERVICE WATER LINE OR 2" WITH A "Y" FOR TWO WATER METERS
 - ③ FIELD VERIFY UTILITY LOCATION, INSTALL WATER LINE UNDER UTILITY
 - Ⓜ DRIVEWAY (SEE SHEET 25-26 FOR DRIVEWAY SUMMARY TABLE)
 - Ⓜ WALKWAY (SEE SHEET 27 FOR WALKWAY SUMMARY TABLE)
- NOTES:**
- REMOVE AND REPLACE YARD DRAIN, SIZE VARIES, SEE DETAIL SHEET 74. CONTRACTOR TO FIELD VERIFY ALL LOCATIONS.
 - SANITARY SEWER, FIBER, TELEPHONE, AND GAS LINES ARE SHOWN PER OWNER PROVIDED DRAWINGS AND BASED ON FIELD LOCATIONS. LOCATIONS SHOWN ARE APPROXIMATE. CONTRACTOR TO FIELD VERIFY LOCATION.
 - ALL PROPOSED WATER SERVICE LINES TO BE INSTALLED OVER THE EXISTING SANITARY SEWER.

TOP OF CURB ELEVATION
EX TC 67.23 RT
EX TC 67.18 LT
FG TC 67.02
EX TC 67.13 RT
EX TC 67.16 LT
FG TC 66.96
EX TC 67.14 RT
EX TC 67.16 LT
FG TC 66.90
EX TC 67.14 RT
EX TC 67.06 LT
FG TC 66.84
EX TC 67.13 RT
EX TC 67.13 LT
FG TC 66.78
EX TC 67.13 RT
EX TC 67.14 LT
FG TC 66.72
EX TC 67.10 RT
EX TC 67.00 LT
FG TC 66.66
EX TC 67.08 RT
EX TC 66.88 LT
FG TC 66.60
EX TC 67.05 RT
EX TC 67.05 LT
FG TC 66.54
EX TC 66.99 RT
EX TC 66.88 LT
FG TC 66.48
EX TC 66.90 RT
EX TC 66.69 LT
FG TC 66.40
EX TC 66.93 RT
EX TC 66.93 LT
FG TC 66.30
EX TC 66.76 RT
EX TC 66.66 LT
FG TC 66.20
EX TC 66.69 RT
EX TC 66.13 LT
FG TC 66.10
EX TC 66.48 RT
EX TC 66.48 LT
FG TC 65.99
EX TC 66.45 RT
EX TC 66.48 LT
FG TC 65.89
EX TC 66.27 RT
EX TC 66.51 LT
FG TC 65.79
EX TC 66.66 RT
EX TC 66.51 LT
FG TC 65.69
EX TC 66.24 RT
EX TC 66.52 LT
FG TC 65.67
EX TC 66.56 RT
EX TC 66.52 LT
FG TC 65.73
EX TC 66.43 RT
EX TC 66.28 LT
FG TC 65.79
EX TC 66.40 RT
EX TC 66.32 LT
FG TC 65.85
EX TC 66.94 RT
EX TC 66.94 LT
FG TC 65.91
EX TC 66.18 RT
EX TC 66.22 LT
FG TC 65.97
EX TC 66.25 RT
EX TC 66.14 LT
FG TC 66.03
EX TC 66.03 RT
EX TC 66.03 LT
FG TC 66.09



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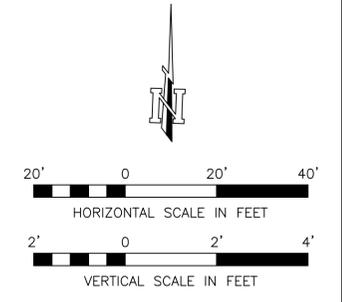
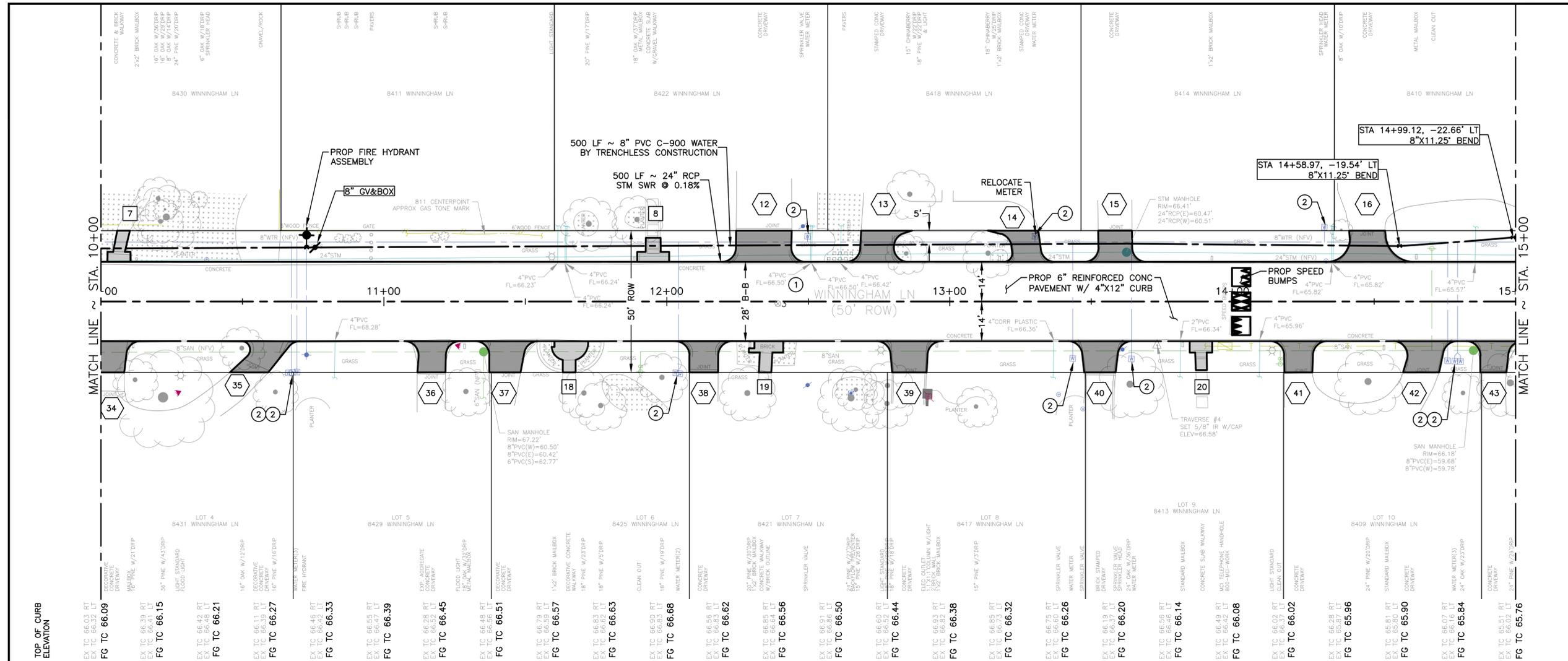
CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

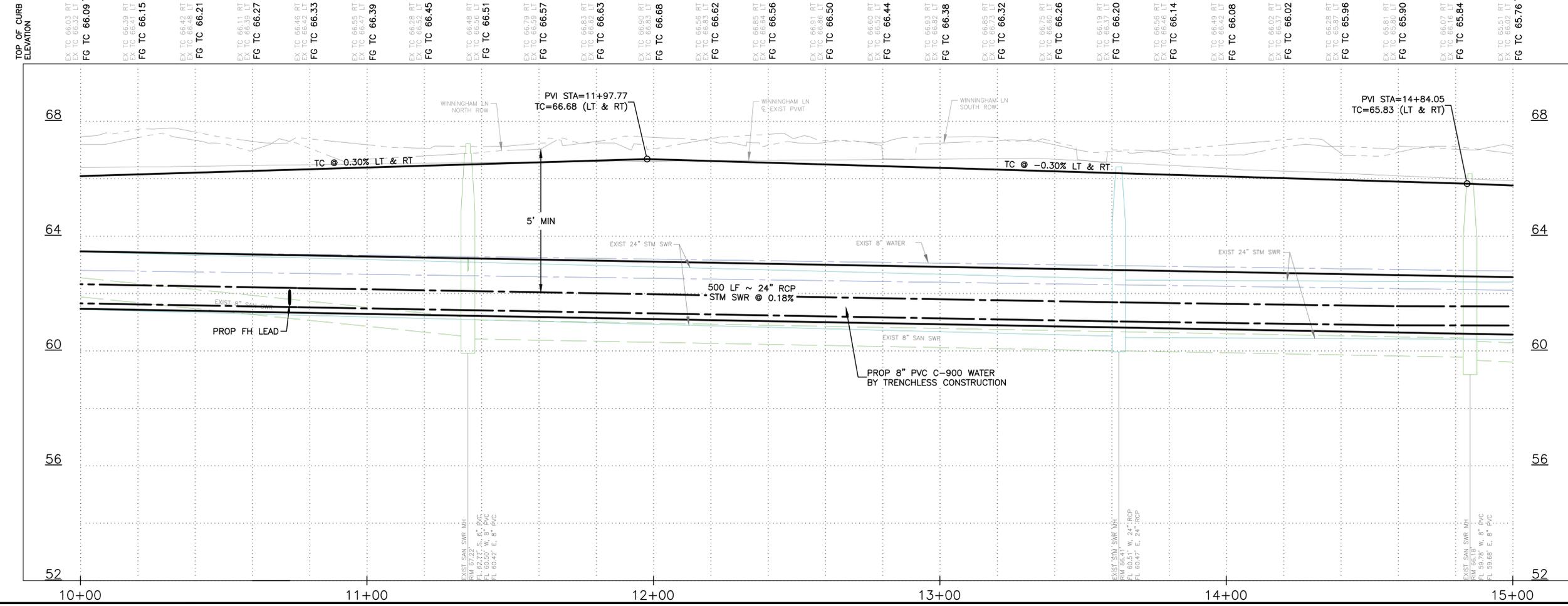
WINNINGHAM LN
 PLAN & PROFILE
 STA 5+00 TO STA 10+00

SUBMITTED: 12/04/23	DESIGNED BY: JMS
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DATE: 12/04/23	SHEET No.: 29 OF 101
SURVEY BY: CFA	DWG. No.:
F B No.: -	

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- LEGEND**
- PROP DRIVEWAY
 - PROP SIDEWALK
 - ① YARD DRAIN, SEE NOTE 1.
 - ② INSTALL 1" SINGLE SERVICE WATER LINE OR 2" WITH A "Y" FOR TWO WATER METERS
 - ③ FIELD VERIFY UTILITY LOCATION, INSTALL WATER LINE UNDER UTILITY
 - Ⓜ DRIVEWAY (SEE SHEET 25-26 FOR DRIVEWAY SUMMARY TABLE)
 - Ⓜ WALKWAY (SEE SHEET 27 FOR WALKWAY SUMMARY TABLE)
- NOTES:**
- REMOVE AND REPLACE YARD DRAIN, SIZE VARIES, SEE DETAIL SHEET 74. CONTRACTOR TO FIELD VERIFY ALL LOCATIONS.
 - SANITARY SEWER, FIBER, TELEPHONE, AND GAS LINES ARE SHOWN PER OWNER PROVIDED DRAWINGS AND BASED ON FIELD LOCATIONS. LOCATIONS SHOWN ARE APPROXIMATE. CONTRACTOR TO FIELD VERIFY LOCATION.
 - ALL PROPOSED WATER SERVICE LINES TO BE INSTALLED OVER THE EXISTING SANITARY SEWER.



NO.	DATE	REVISIONS



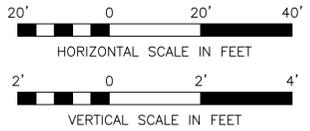
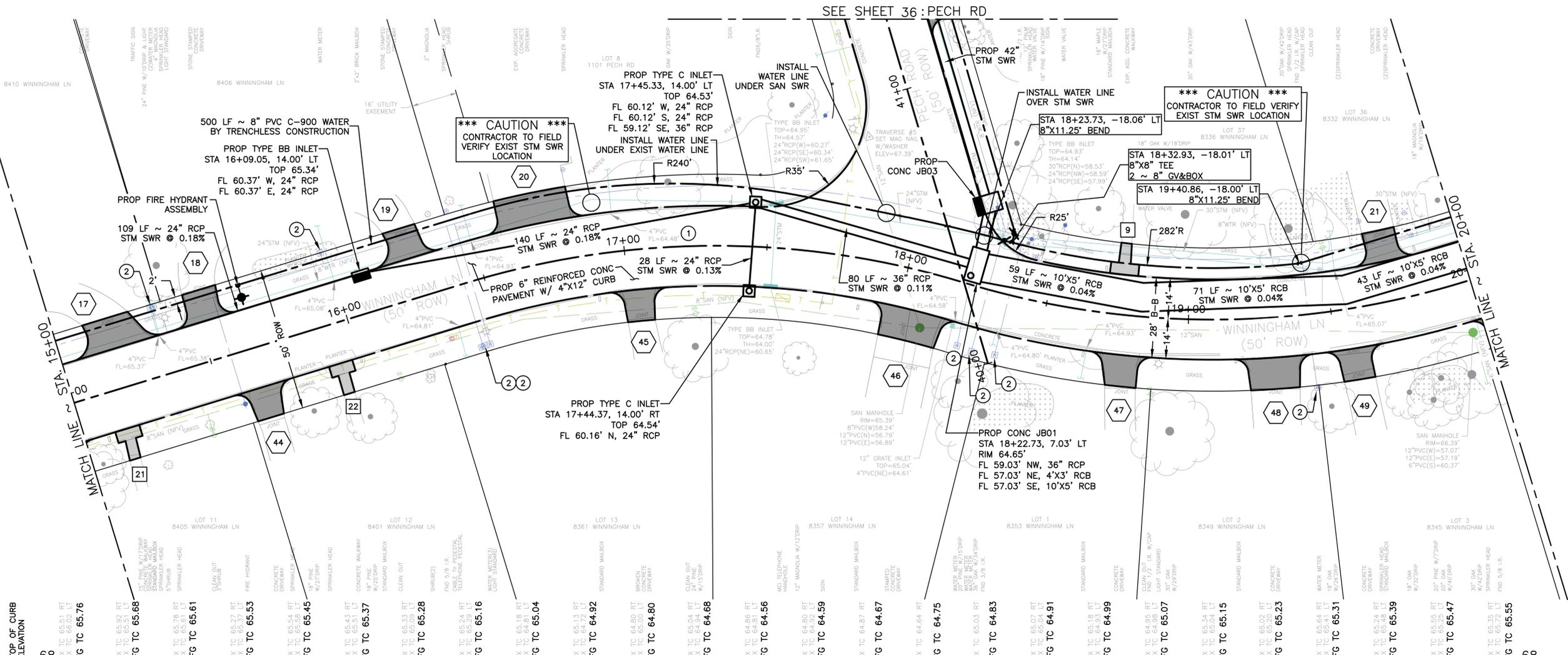
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CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

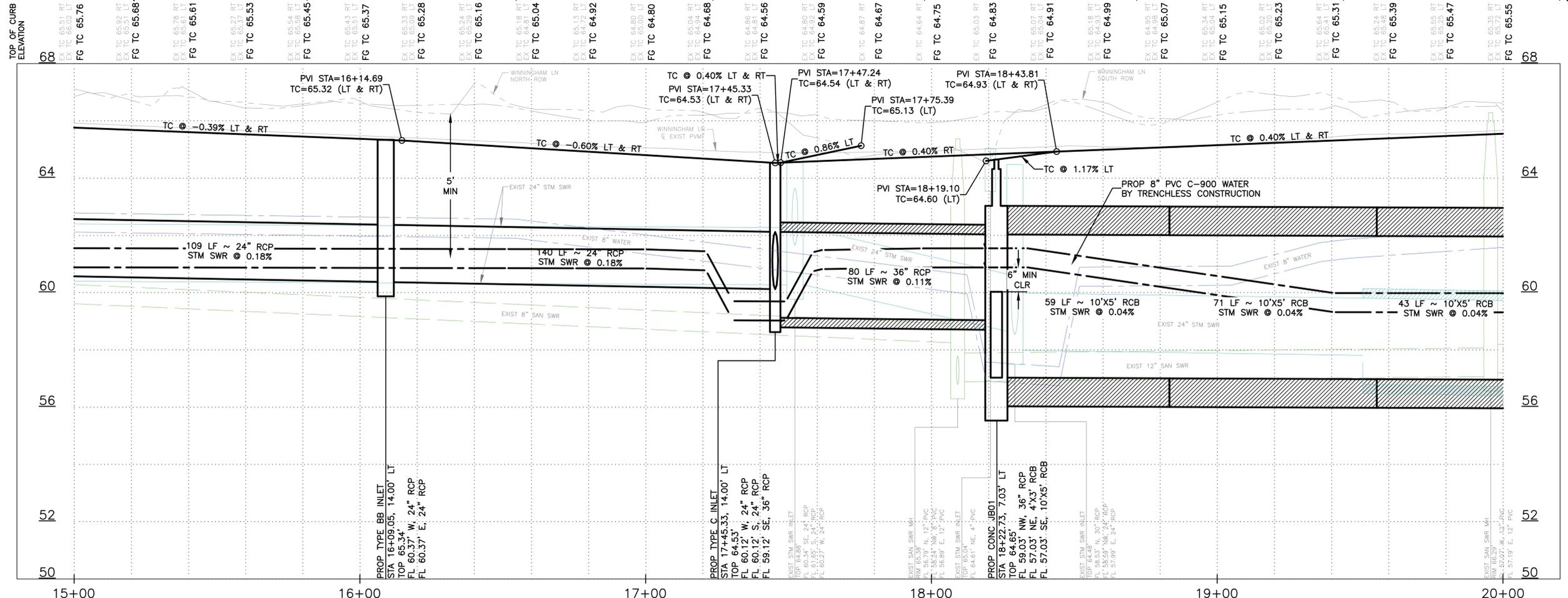
WINNINGHAM LN
 PLAN & PROFILE
 STA 10+00 TO STA 15+00

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SURVEY BY: CFA	DWG. No.:
F B No.: -	



- LEGEND**
- PROP DRIVEWAY
 - PROP SIDEWALK
 - ① YARD DRAIN, SEE NOTE 1.
 - ② INSTALL 1" SINGLE SERVICE WATER LINE OR 2" WITH A "Y" FOR TWO WATER METERS
 - ③ FIELD VERIFY UTILITY LOCATION, INSTALL WATER LINE UNDER UTILITY
 - Ⓜ DRIVEWAY (SEE SHEET 25-26 FOR DRIVEWAY SUMMARY TABLE)
 - Ⓜ WALKWAY (SEE SHEET 27 FOR WALKWAY SUMMARY TABLE)

- NOTES:**
1. REMOVE AND REPLACE YARD DRAIN, SIZE VARIES, SEE DETAIL SHEET 74. CONTRACTOR TO FIELD VERIFY ALL LOCATIONS.
 2. SANITARY SEWER, FIBER, TELEPHONE, AND GAS LINES ARE SHOWN PER OWNER PROVIDED DRAWINGS AND BASED ON FIELD LOCATIONS. LOCATIONS SHOWN ARE APPROXIMATE. CONTRACTOR TO FIELD VERIFY LOCATION.
 3. ALL PROPOSED WATER SERVICE LINES TO BE INSTALLED OVER THE EXISTING SANITARY SEWER.



NO.	DATE	REVISIONS



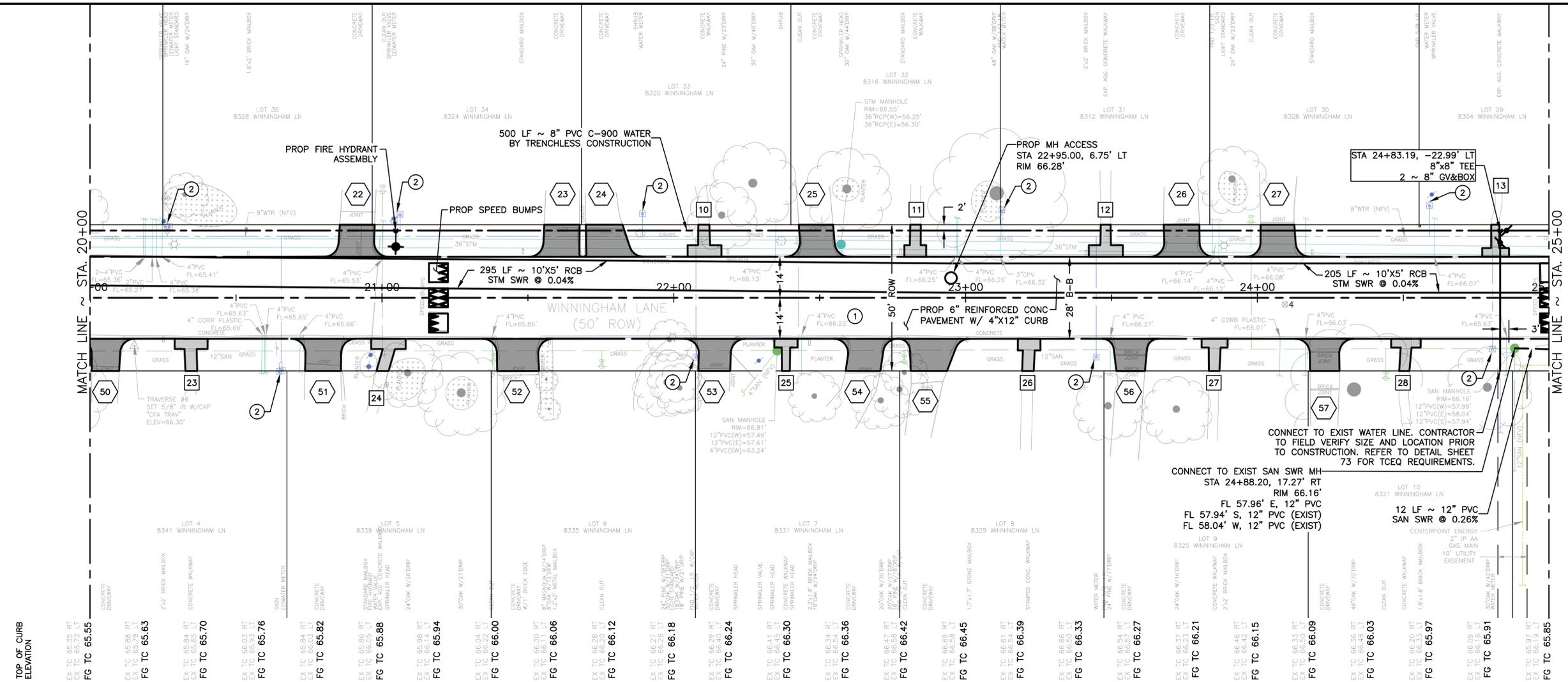
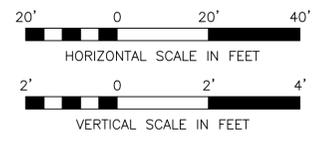
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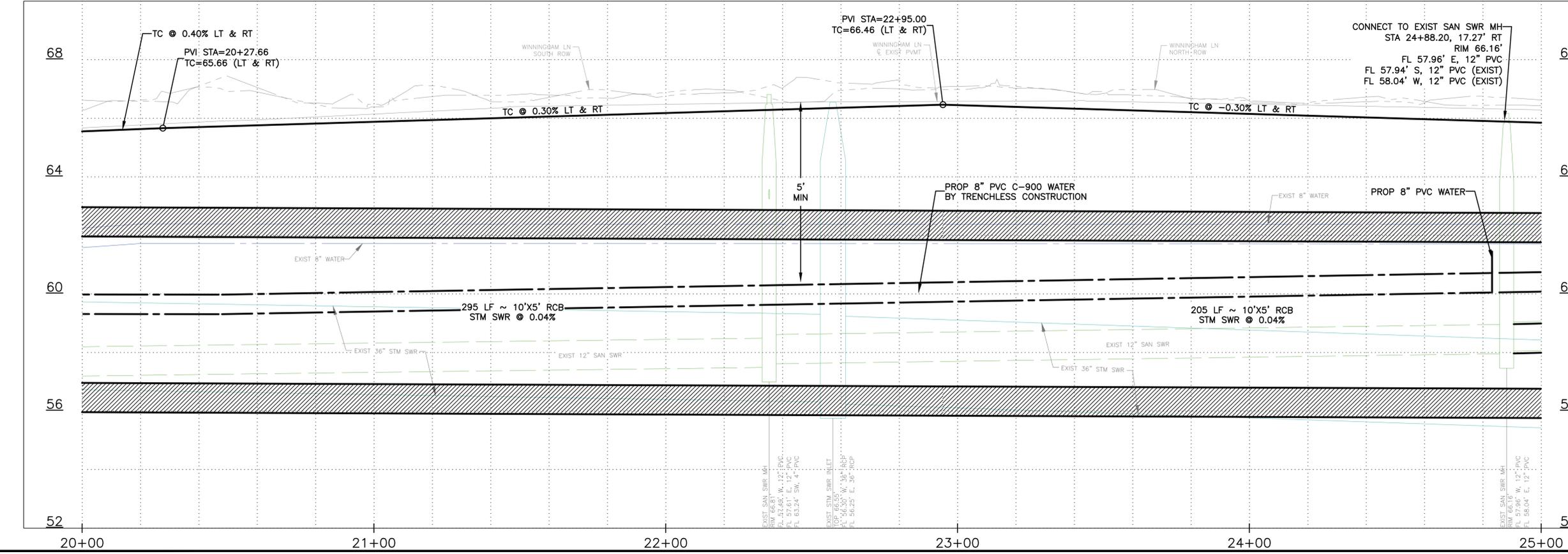
WINNINGHAM LN
 PLAN & PROFILE
 STA 15+00 TO STA 20+00

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DATE: 12/04/23	SHEET No.: 31 OF 101
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- LEGEND**
- PROP DRIVEWAY
 - PROP SIDEWALK
 - ① YARD DRAIN, SEE NOTE 1.
 - ② INSTALL 1" SINGLE SERVICE WATER LINE OR 2" WITH A "Y" FOR TWO WATER METERS
 - ③ FIELD VERIFY UTILITY LOCATION, INSTALL WATER LINE UNDER UTILITY
 - ④ DRIVEWAY (SEE SHEET 25-26 FOR DRIVEWAY SUMMARY TABLE)
 - ⑤ WALKWAY (SEE SHEET 27 FOR WALKWAY SUMMARY TABLE)
- NOTES:**
- REMOVE AND REPLACE YARD DRAIN, SIZE VARIES, SEE DETAIL SHEET 74. CONTRACTOR TO FIELD VERIFY ALL LOCATIONS.
 - SANITARY SEWER, FIBER, TELEPHONE, AND GAS LINES ARE SHOWN PER OWNER PROVIDED DRAWINGS AND BASED ON FIELD LOCATIONS. LOCATIONS SHOWN ARE APPROXIMATE. CONTRACTOR TO FIELD VERIFY LOCATION.
 - ALL PROPOSED WATER SERVICE LINES TO BE INSTALLED OVER THE EXISTING SANITARY SEWER.

TOP OF CURB ELEVATION
EX TC 65.35 RT
FG TC 65.72 LT
EX TC 65.98 RT
FG TC 65.63
EX TC 65.84 RT
FG TC 65.70
EX TC 65.03 RT
FG TC 65.76
EX TC 65.84 RT
FG TC 65.82
EX TC 65.86 RT
FG TC 65.88
EX TC 65.98 RT
FG TC 65.94
EX TC 66.04 RT
FG TC 66.00
EX TC 66.10 RT
FG TC 66.06
EX TC 66.28 RT
FG TC 66.12
EX TC 66.27 RT
FG TC 66.18
EX TC 66.29 RT
FG TC 66.24
EX TC 66.41 RT
FG TC 66.30
EX TC 66.34 RT
FG TC 66.36
EX TC 66.47 RT
FG TC 66.42
EX TC 66.59 RT
FG TC 66.45
EX TC 66.61 RT
FG TC 66.39
EX TC 66.66 RT
FG TC 66.33
EX TC 66.54 RT
FG TC 66.27
EX TC 66.37 RT
FG TC 66.21
EX TC 66.46 RT
FG TC 66.15
EX TC 66.33 RT
FG TC 66.09
EX TC 66.35 RT
FG TC 66.03
EX TC 66.20 RT
FG TC 65.97
EX TC 66.09 RT
FG TC 65.91
EX TC 65.97 RT
FG TC 65.90
EX TC 65.97 RT
FG TC 65.85



NO.	DATE	REVISIONS



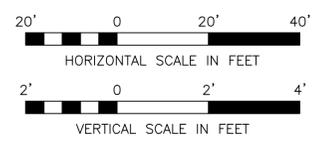
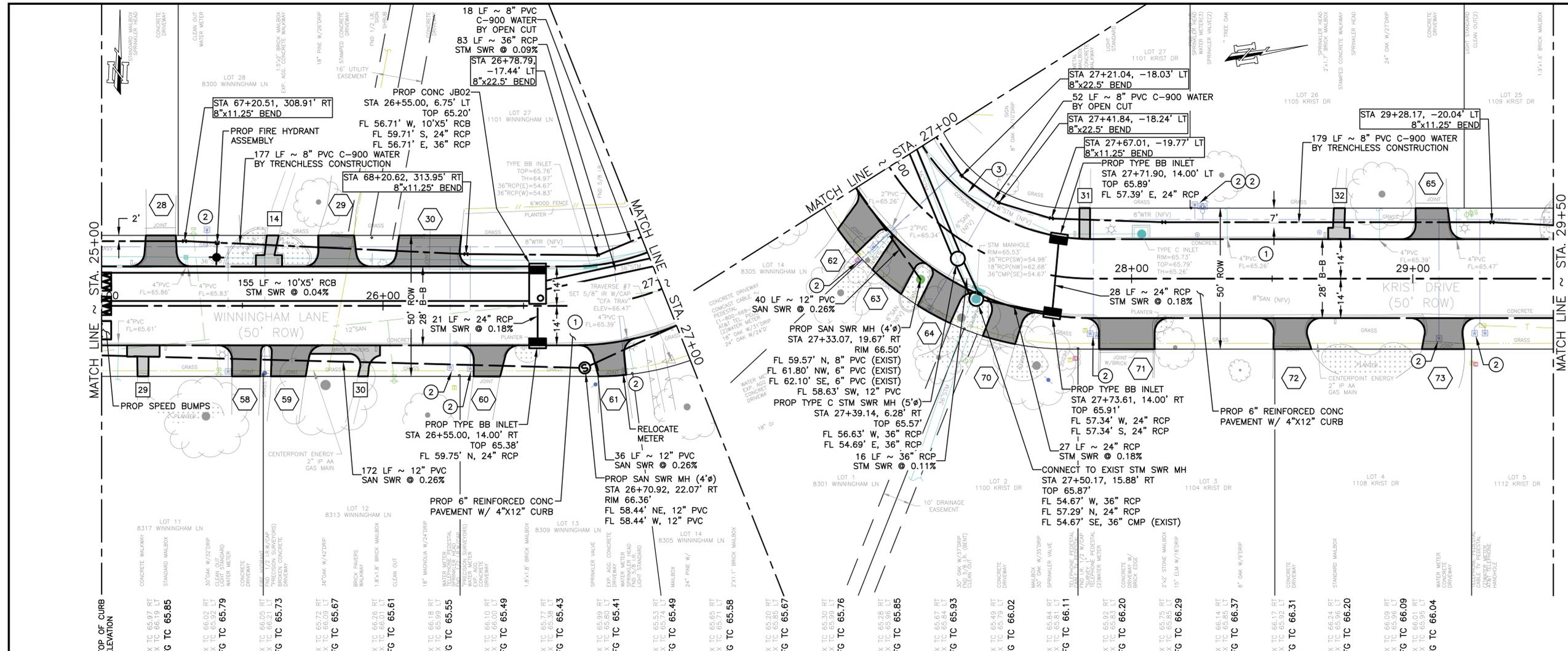
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BRIGHTON PLACE RECONSTRUCTION

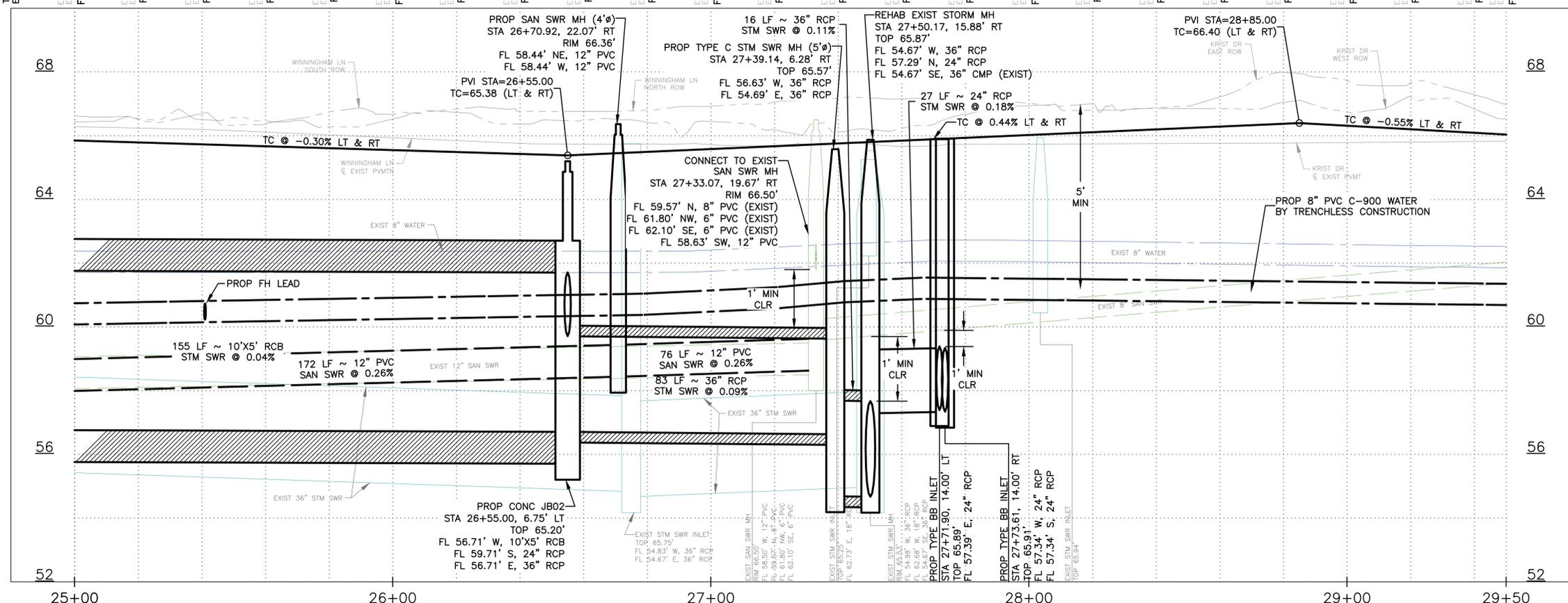
WINNINGHAM LN
 PLAN & PROFILE
 STA 20+00 TO STA 25+00

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DATE: 12/04/23	SHEET No.: 32 OF 101
SURVEY BY: CFA	DWG. No.:
F B No.: -	



- LEGEND**
- PROP DRIVEWAY
 - PROP SIDEWALK
 - ① YARD DRAIN, SEE NOTE 1.
 - ② INSTALL 1" SINGLE SERVICE WATER LINE OR 2" WITH A "Y" FOR TWO WATER METERS
 - ③ FIELD VERIFY UTILITY LOCATION, INSTALL WATER LINE UNDER UTILITY
 - ④ DRIVEWAY (SEE SHEET 25-26 FOR DRIVEWAY SUMMARY TABLE)
 - ⑤ WALKWAY (SEE SHEET 27 FOR WALKWAY SUMMARY TABLE)

- NOTES:**
1. REMOVE AND REPLACE YARD DRAIN, SIZE VARIES, SEE DETAIL SHEET 74. CONTRACTOR TO FIELD VERIFY ALL LOCATIONS.
 2. SANITARY SEWER, FIBER, TELEPHONE, AND GAS LINES ARE SHOWN PER OWNER PROVIDED DRAWINGS AND BASED ON FIELD LOCATIONS. LOCATIONS SHOWN ARE APPROXIMATE. CONTRACTOR TO FIELD VERIFY LOCATION.
 3. ALL PROPOSED WATER SERVICE LINES TO BE INSTALLED OVER THE EXISTING SANITARY SEWER.



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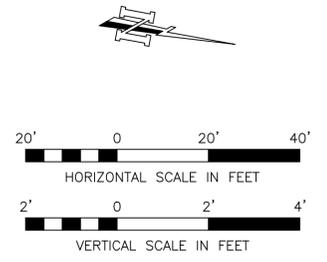
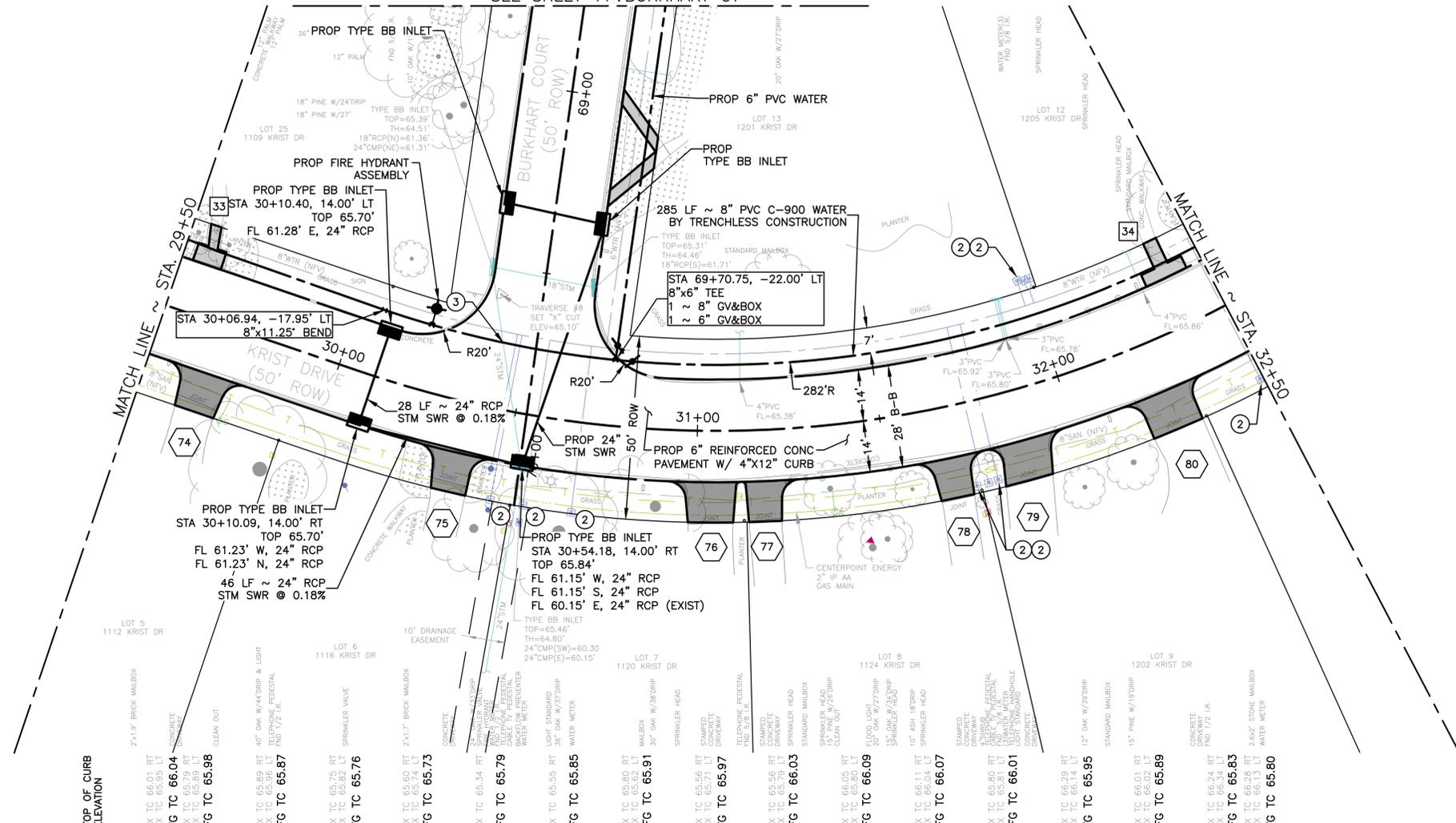
BRIGHTON PLACE RECONSTRUCTION

WINNINGHAM LN & KRIST DR
 PLAN & PROFILE
 STA 25+00 TO STA 29+50

SUBMITTED: 12/04/23	DESIGNED BY: JMS
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DATE: 12/04/23	SHEET No.: 33 OF 101
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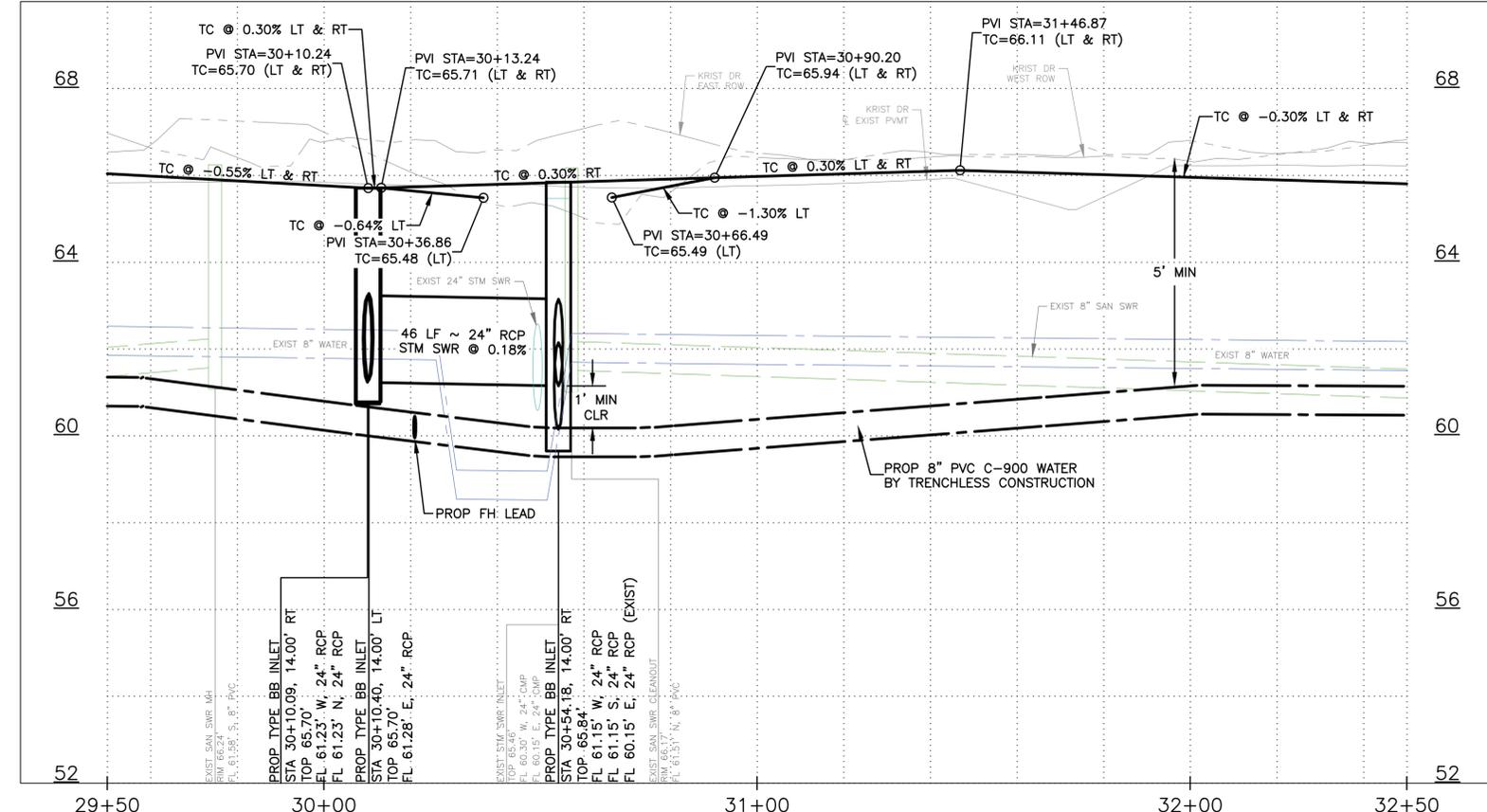
SEE SHEET 41 : BURKHART CT



- LEGEND**
- PROP DRIVEWAY
 - PROP SIDEWALK
- ① YARD DRAIN, SEE NOTE 1.
 - ② INSTALL 1" SINGLE SERVICE WATER LINE OR 2" WITH A "Y" FOR TWO WATER METERS
 - ③ FIELD VERIFY UTILITY LOCATION, INSTALL WATER LINE UNDER UTILITY
 - Ⓜ DRIVEWAY (SEE SHEET 25-26 FOR DRIVEWAY SUMMARY TABLE)
 - Ⓜ WALKWAY (SEE SHEET 27 FOR WALKWAY SUMMARY TABLE)

- NOTES:**
1. REMOVE AND REPLACE YARD DRAIN, SIZE VARIES, SEE DETAIL SHEET 74. CONTRACTOR TO FIELD VERIFY ALL LOCATIONS.
 2. SANITARY SEWER, FIBER, TELEPHONE, AND GAS LINES ARE SHOWN PER OWNER PROVIDED DRAWINGS AND BASED ON FIELD LOCATIONS. LOCATIONS SHOWN ARE APPROXIMATE. CONTRACTOR TO FIELD VERIFY LOCATION.
 3. ALL PROPOSED WATER SERVICE LINES TO BE INSTALLED OVER THE EXISTING SANITARY SEWER.

TOP OF CURB ELEVATION
EX TC 66.01 RT
EX TC 65.95 LT
FG TC 66.04
EX TC 65.79 RT
EX TC 65.88 LT
FG TC 65.88
EX TC 65.89 RT
EX TC 65.98 LT
FG TC 65.87
EX TC 65.75 RT
EX TC 65.82 LT
FG TC 65.76
EX TC 65.60 RT
EX TC 65.74 LT
FG TC 65.73
EX TC 65.34 RT
EX TC 65.79 RT
FG TC 65.79
EX TC 65.55 RT
EX TC 65.62 LT
FG TC 65.85
EX TC 65.80 RT
EX TC 65.82 LT
FG TC 65.91
EX TC 65.56 RT
EX TC 65.91 LT
FG TC 65.97
EX TC 65.55 RT
EX TC 65.79 LT
FG TC 66.03
EX TC 66.05 RT
EX TC 65.80 LT
FG TC 66.09
EX TC 66.11 RT
EX TC 66.04 LT
FG TC 66.07
EX TC 65.80 RT
EX TC 66.14 LT
FG TC 66.01
EX TC 66.29 RT
EX TC 66.14 LT
FG TC 65.95
EX TC 66.02 RT
EX TC 66.02 LT
FG TC 65.89
EX TC 66.24 RT
EX TC 66.02 LT
FG TC 65.83
EX TC 66.29 RT
EX TC 66.29 LT
FG TC 65.80



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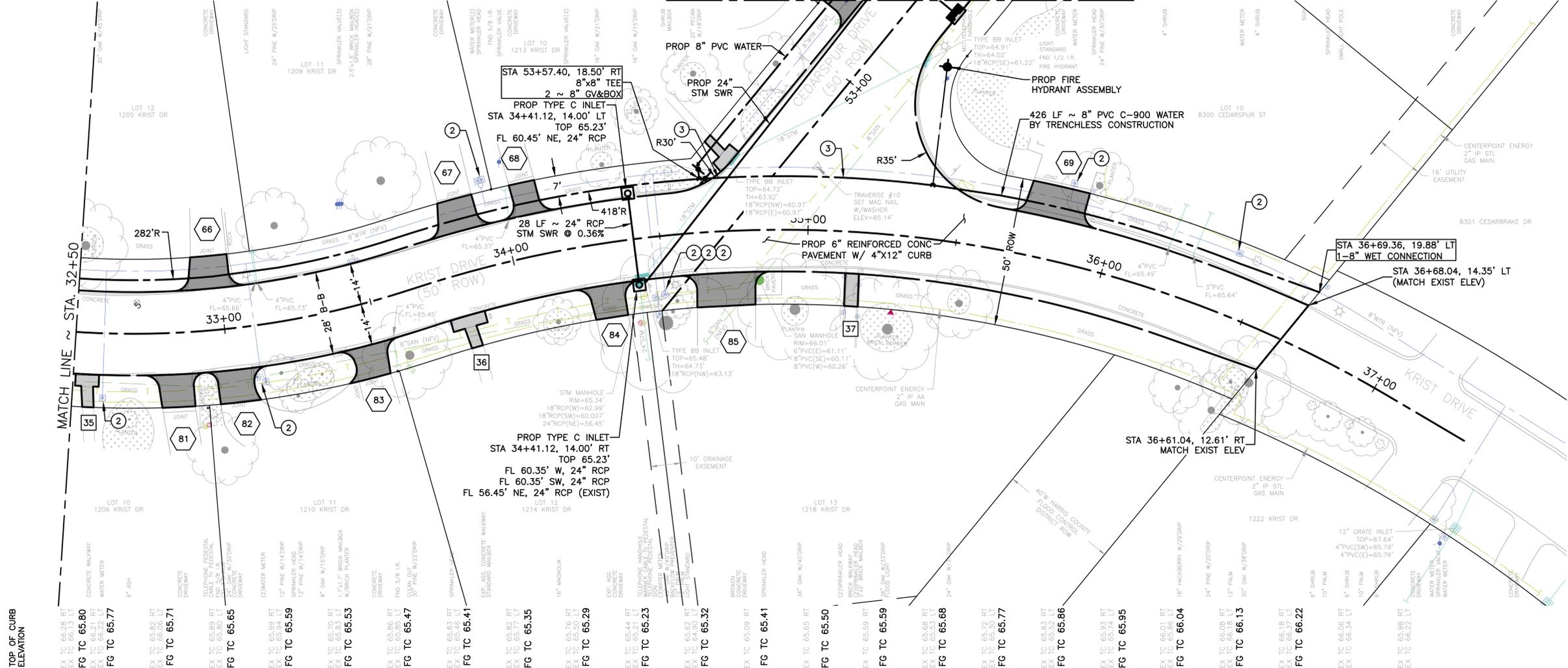
BRIGHTON PLACE RECONSTRUCTION

KRIST DR
 PLAN & PROFILE
 STA 29+50+00 TO STA 32+50

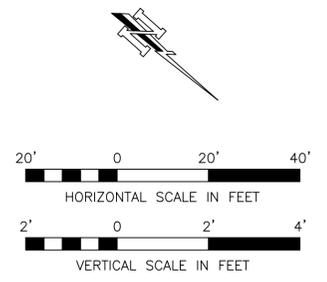
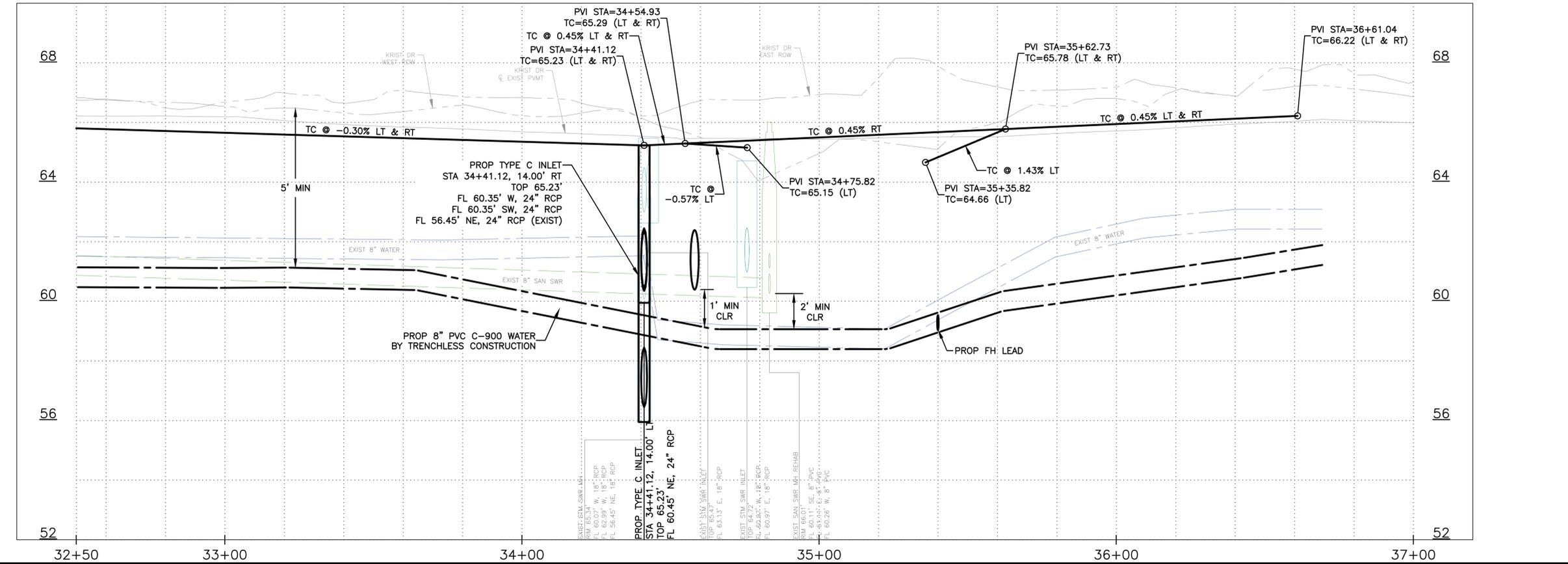
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SURVEY BY: CFA	DWG. No.:
F B No.: -	

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SEE SHEET 38 : CEDARSPUR DR



STATION	TOP OF CURB ELEVATION
32+50	65.28 RT, 66.13 LT
32+50	65.80 TC
32+50	66.22 LT
32+50	65.77 TC
33+00	65.82 RT, 66.06 LT
33+00	65.71 TC
33+00	65.99 RT, 65.94 LT
33+00	65.65 TC
33+00	65.99 RT, 65.94 LT
33+00	65.59 TC
33+00	65.70 RT, 65.63 LT
33+00	65.53 TC
33+00	65.86 RT, 65.46 LT
33+00	65.47 TC
33+00	65.93 RT, 65.46 LT
33+00	65.41 TC
33+00	65.92 RT, 65.77 LT
33+00	65.35 TC
33+00	65.76 RT, 65.40 LT
33+00	65.29 TC
33+00	65.94 RT, 65.24 LT
33+00	65.23 TC
33+00	65.62 RT, 64.90 LT
33+00	65.32 TC
33+00	65.09 RT, 65.41 TC
33+00	65.65 RT, 65.53 LT
33+00	65.50 TC
33+00	65.59 RT, 65.59 LT
33+00	65.59 TC
33+00	65.68 RT, 65.53 LT
33+00	65.68 TC
33+00	65.72 RT, 65.77 LT
33+00	65.77 TC
33+00	65.83 RT, 65.93 LT
33+00	65.86 TC
33+00	65.93 RT, 65.74 LT
33+00	65.95 TC
33+00	66.01 RT, 66.04 LT
33+00	66.04 TC
33+00	66.08 RT, 66.37 LT
33+00	66.13 TC
33+00	66.18 RT, 66.06 LT
33+00	66.22 TC
33+00	65.98 RT, 66.34 LT
33+00	66.22 TC
33+00	65.98 RT, 66.22 LT
33+00	66.22 TC



- LEGEND**
- PROP DRIVEWAY
 - PROP SIDEWALK
 - ① YARD DRAIN, SEE NOTE 1.
 - ② INSTALL 1" SINGLE SERVICE WATER LINE OR 2" WITH A "Y" FOR TWO WATER METERS
 - ③ FIELD VERIFY UTILITY LOCATION, INSTALL WATER LINE UNDER UTILITY
 - Ⓜ DRIVEWAY (SEE SHEET 25-26 FOR DRIVEWAY SUMMARY TABLE)
 - Ⓜ WALKWAY (SEE SHEET 27 FOR WALKWAY SUMMARY TABLE)

- NOTES:**
- REMOVE AND REPLACE YARD DRAIN, SIZE VARIES, SEE DETAIL SHEET 74. CONTRACTOR TO FIELD VERIFY ALL LOCATIONS.
 - SANITARY SEWER, FIBER, TELEPHONE, AND GAS LINES ARE SHOWN PER OWNER PROVIDED DRAWINGS AND BASED ON FIELD LOCATIONS. LOCATIONS SHOWN ARE APPROXIMATE. CONTRACTOR TO FIELD VERIFY LOCATION.
 - ALL PROPOSED WATER SERVICE LINES TO BE INSTALLED OVER THE EXISTING SANITARY SEWER.

NO.	DATE	REVISIONS



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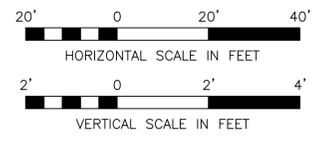
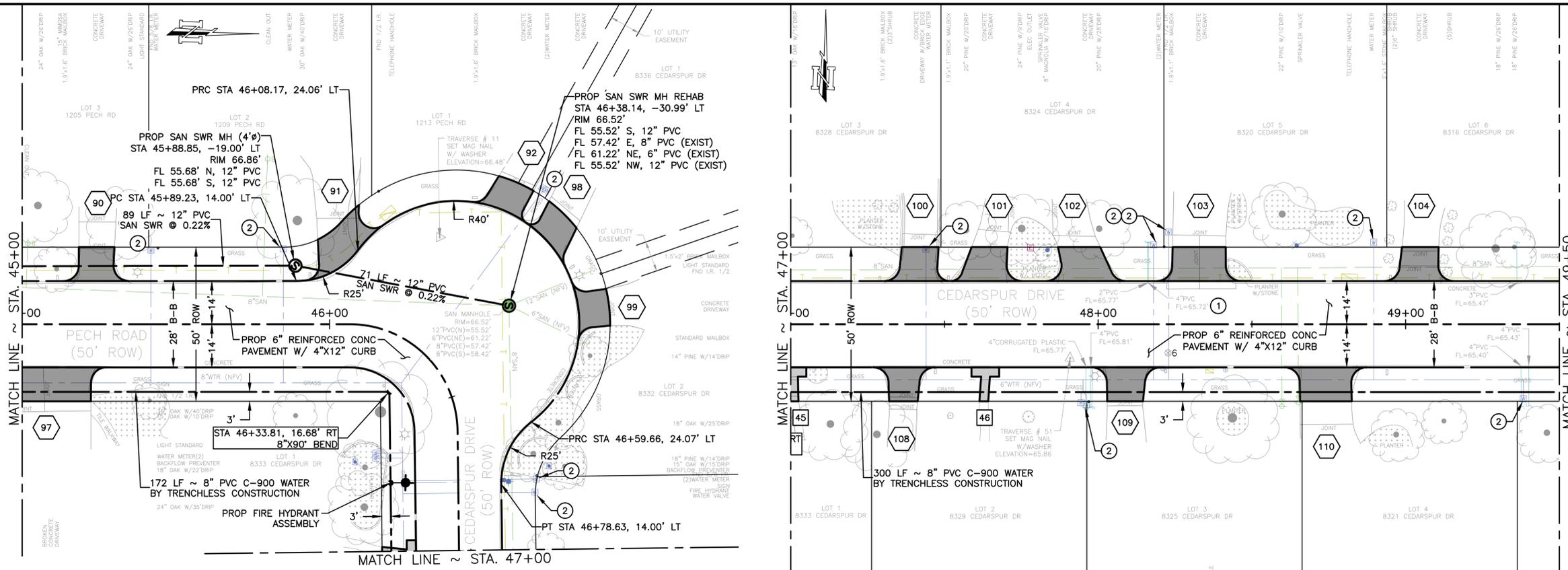
CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

KRIST DR
 PLAN & PROFILE
 STA 32+50 TO STA 37+00

SUBMITTED: 12/04/23	DESIGNED BY: JMS
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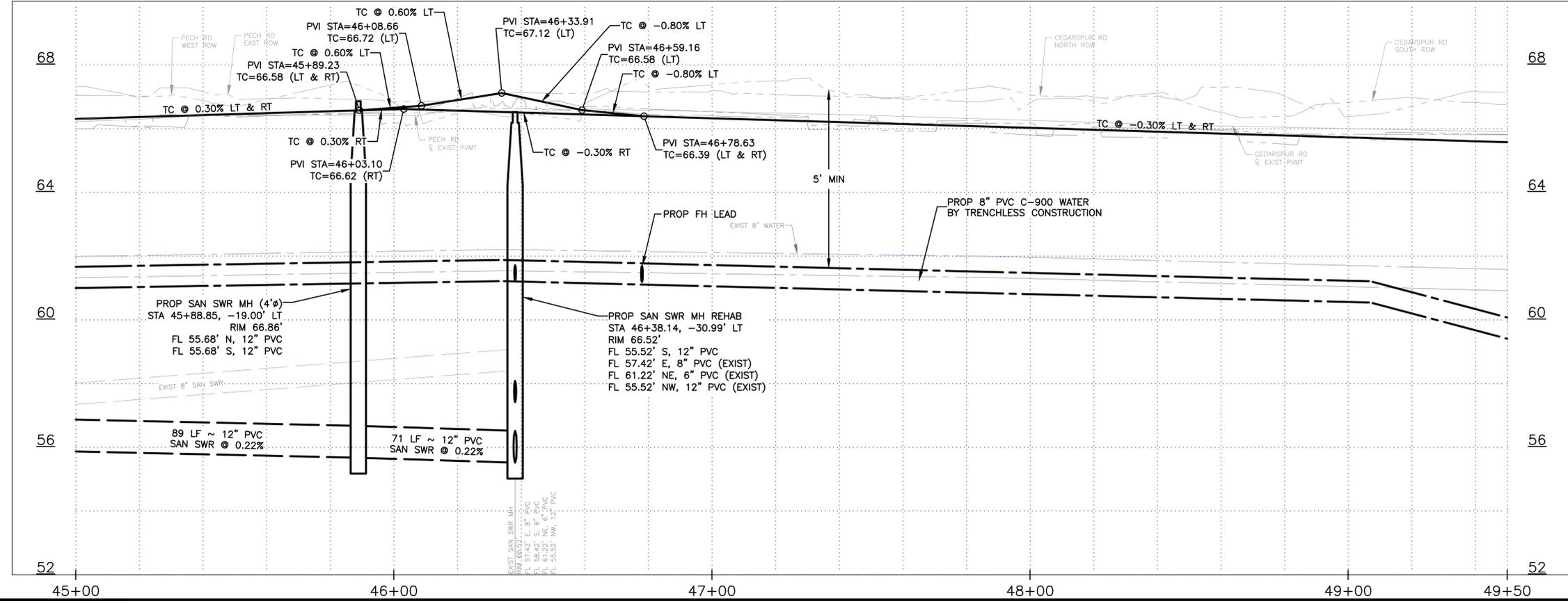
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- LEGEND**
- PROP DRIVEWAY
 - PROP SIDEWALK
 - ① YARD DRAIN, SEE NOTE 1.
 - ② INSTALL 1" SINGLE SERVICE WATER LINE OR 2" WITH A "Y" FOR TWO WATER METERS
 - ③ FIELD VERIFY UTILITY LOCATION, INSTALL WATER LINE UNDER UTILITY
 - # DRIVEWAY (SEE SHEET 25-26 FOR DRIVEWAY SUMMARY TABLE)
 - # WALKWAY (SEE SHEET 27 FOR WALKWAY SUMMARY TABLE)

- NOTES:**
1. REMOVE AND REPLACE YARD DRAIN, SIZE VARIES, SEE DETAIL SHEET 74. CONTRACTOR TO FIELD VERIFY ALL LOCATIONS.
 2. SANITARY SEWER, FIBER, TELEPHONE, AND GAS LINES ARE SHOWN PER OWNER PROVIDED DRAWINGS AND BASED ON FIELD LOCATIONS. LOCATIONS SHOWN ARE APPROXIMATE. CONTRACTOR TO FIELD VERIFY LOCATION.
 3. ALL PROPOSED WATER SERVICE LINES TO BE INSTALLED OVER THE EXISTING SANITARY SEWER.
 4. CONTRACTOR TO RECONNECT SANITARY SEWER SERVICE LINES.

TOP OF CURB ELEVATION	STATION	ELEVATION
EX TC 66.99 RT	45+00	66.99
EX TC 66.30 LT	45+00	66.30
FG TC 66.31	45+00	66.31
EX TC 66.05 RT	45+00	66.05
EX TC 66.08 LT	45+00	66.08
FG TC 66.37	45+00	66.37
EX TC 66.43 RT	45+00	66.43
EX TC 66.43 LT	45+00	66.43
FG TC 66.43	45+00	66.43
EX TC 66.42 RT	45+00	66.42
EX TC 66.42 LT	45+00	66.42
FG TC 66.49	45+00	66.49
EX TC 66.45 RT	45+00	66.45
EX TC 66.47 LT	45+00	66.47
FG TC 66.55	45+00	66.55
EX TC 66.47 RT	45+00	66.47
EX TC 66.18 LT	45+00	66.18
FG TC 66.61	45+00	66.61
EX TC 66.60 RT	45+00	66.60
EX TC 66.60 LT	45+00	66.60
FG TC 66.57	45+00	66.57
EX TC 66.64 RT	45+00	66.64
EX TC 66.92 LT	45+00	66.92
FG TC 66.51	45+00	66.51
EX TC 66.54 RT	45+00	66.54
EX TC 66.69 LT	45+00	66.69
FG TC 66.45	45+00	66.45
EX TC 66.45 RT	45+00	66.45
EX TC 66.44 LT	45+00	66.44
FG TC 66.39	45+00	66.39
EX TC 66.41 RT	45+00	66.41
EX TC 66.43 LT	45+00	66.43
FG TC 66.33	45+00	66.33
EX TC 66.37 RT	45+00	66.37
EX TC 66.44 LT	45+00	66.44
FG TC 66.27	45+00	66.27
EX TC 66.98 RT	45+00	66.98
EX TC 66.11 LT	45+00	66.11
FG TC 66.21	45+00	66.21
EX TC 66.16 RT	45+00	66.16
EX TC 66.25 LT	45+00	66.25
FG TC 66.15	45+00	66.15
EX TC 66.17 RT	45+00	66.17
EX TC 66.25 LT	45+00	66.25
FG TC 66.09	45+00	66.09
EX TC 66.16 RT	45+00	66.16
EX TC 66.80 LT	45+00	66.80
FG TC 66.03	45+00	66.03
EX TC 66.05 RT	45+00	66.05
EX TC 66.01 LT	45+00	66.01
FG TC 65.97	45+00	65.97
EX TC 66.01 RT	45+00	66.01
EX TC 65.72 LT	45+00	65.72
FG TC 65.91	45+00	65.91
EX TC 65.98 RT	45+00	65.98
EX TC 65.95 LT	45+00	65.95
FG TC 65.85	45+00	65.85
EX TC 65.92 RT	45+00	65.92
EX TC 65.85 LT	45+00	65.85
FG TC 65.79	45+00	65.79
EX TC 65.93 RT	45+00	65.93
EX TC 65.84 LT	45+00	65.84
FG TC 65.73	45+00	65.73
EX TC 65.82 RT	45+00	65.82
EX TC 65.86 LT	45+00	65.86
FG TC 65.67	45+00	65.67
EX TC 65.81 RT	45+00	65.81
EX TC 65.81 LT	45+00	65.81
FG TC 65.61	45+00	65.61
EX TC 65.82 RT	45+00	65.82
EX TC 65.82 LT	45+00	65.82
FG TC 65.58	45+00	65.58



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CITY OF SPRING VALLEY VILLAGE

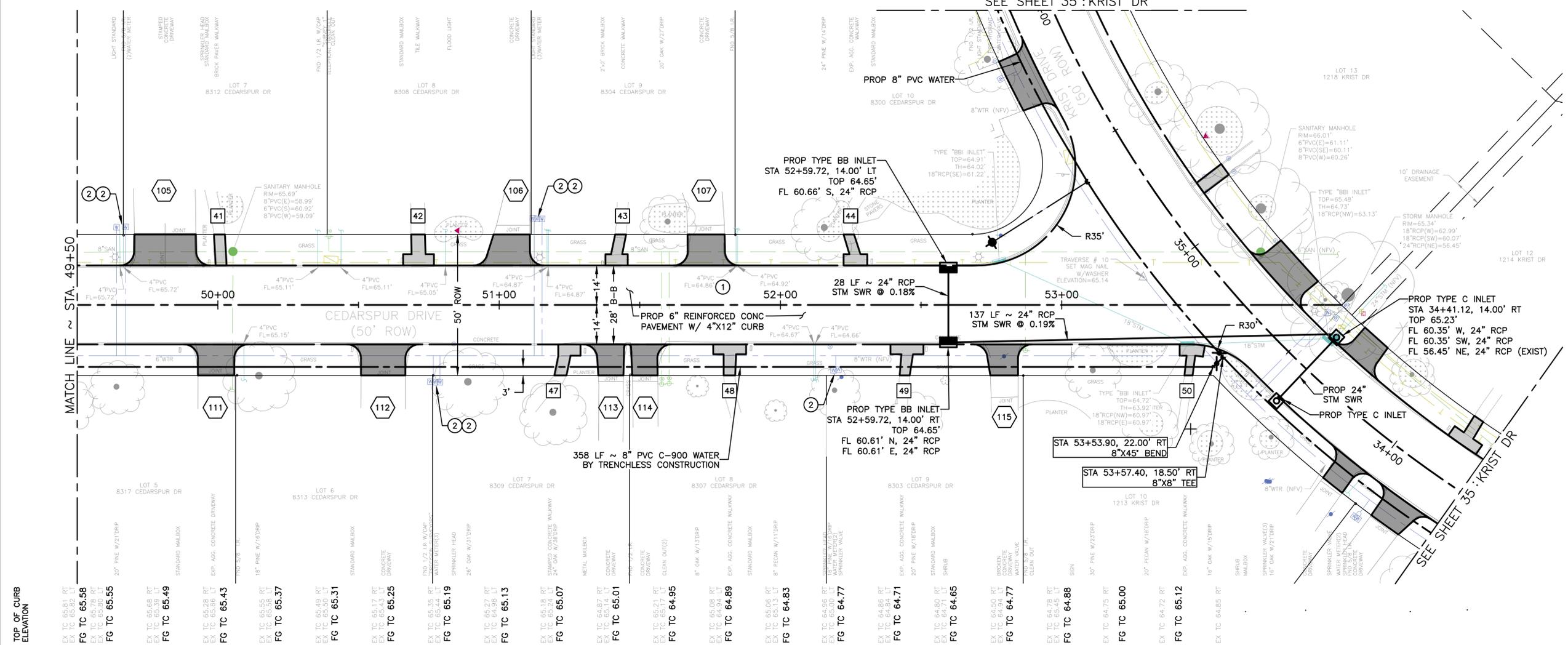
BRIGHTON PLACE RECONSTRUCTION

PECH RD & CEDARSPUR DR
 PLAN & PROFILE
 STA 45+00 TO STA 49+50

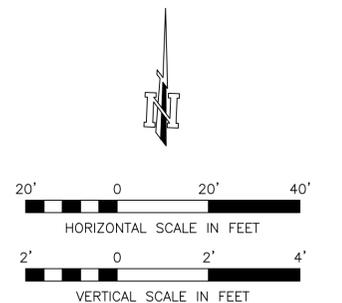
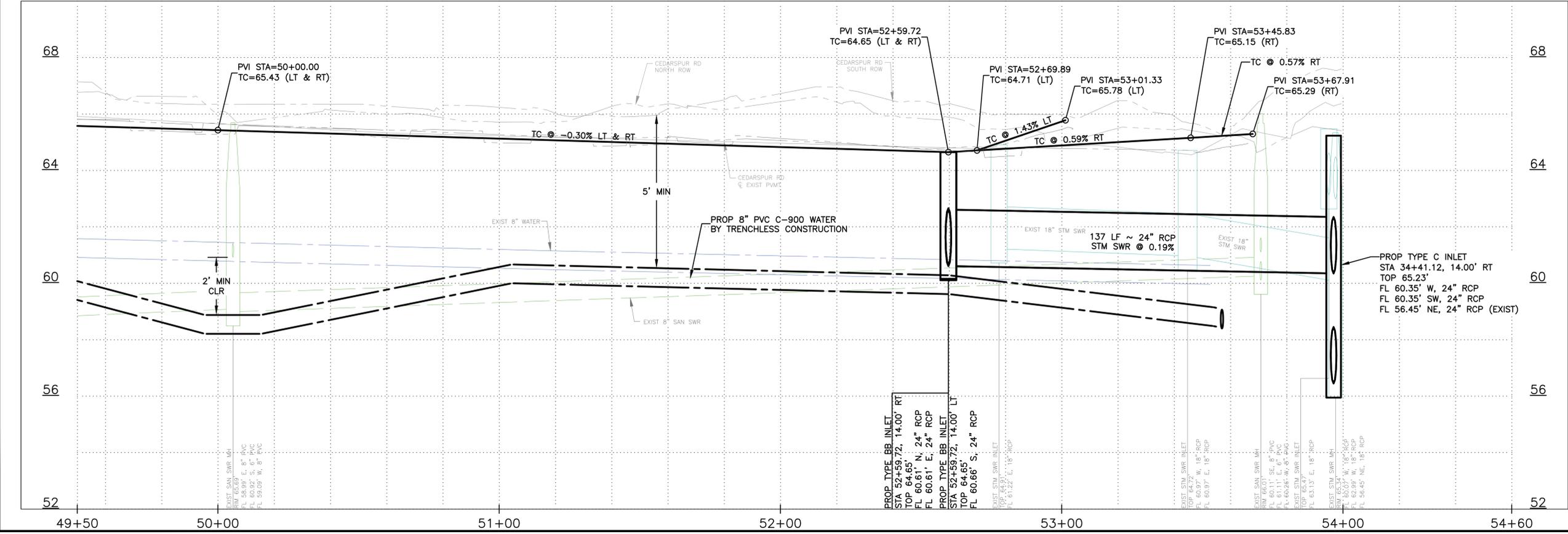
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SEE SHEET 35 : KRIST DR



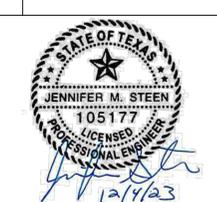
STATION	TOP OF CURB ELEVATION
49+50	65.81 RT, 65.82 LT
50+00	65.58 RT, 65.59 LT
51+00	65.49 RT, 65.50 LT
52+00	65.17 RT, 65.18 LT
53+00	64.78 RT, 64.79 LT
54+00	64.88 RT, 64.89 LT



- LEGEND**
- PROP DRIVEWAY
 - PROP SIDEWALK
 - ① YARD DRAIN, SEE NOTE 1.
 - ② INSTALL 1" SINGLE SERVICE WATER LINE OR 2" WITH A "Y" FOR TWO WATER METERS
 - ③ FIELD VERIFY UTILITY LOCATION, INSTALL WATER LINE UNDER UTILITY
 - # DRIVEWAY (SEE SHEET 25-26 FOR DRIVEWAY SUMMARY TABLE)
 - # WALKWAY (SEE SHEET 27 FOR WALKWAY SUMMARY TABLE)

- NOTES:**
1. REMOVE AND REPLACE YARD DRAIN, SIZE VARIES, SEE DETAIL SHEET 74. CONTRACTOR TO FIELD VERIFY ALL LOCATIONS.
 2. SANITARY SEWER, FIBER, TELEPHONE, AND GAS LINES ARE SHOWN PER OWNER PROVIDED DRAWINGS AND BASED ON FIELD LOCATIONS. LOCATIONS SHOWN ARE APPROXIMATE. CONTRACTOR TO FIELD VERIFY LOCATION.
 3. ALL PROPOSED WATER SERVICE LINES TO BE INSTALLED OVER THE EXISTING SANITARY SEWER.
 4. CONTRACTOR TO RECONNECT SANITARY SEWER SERVICE LINES.

NO.	DATE	REVISIONS



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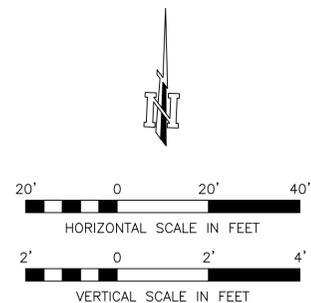
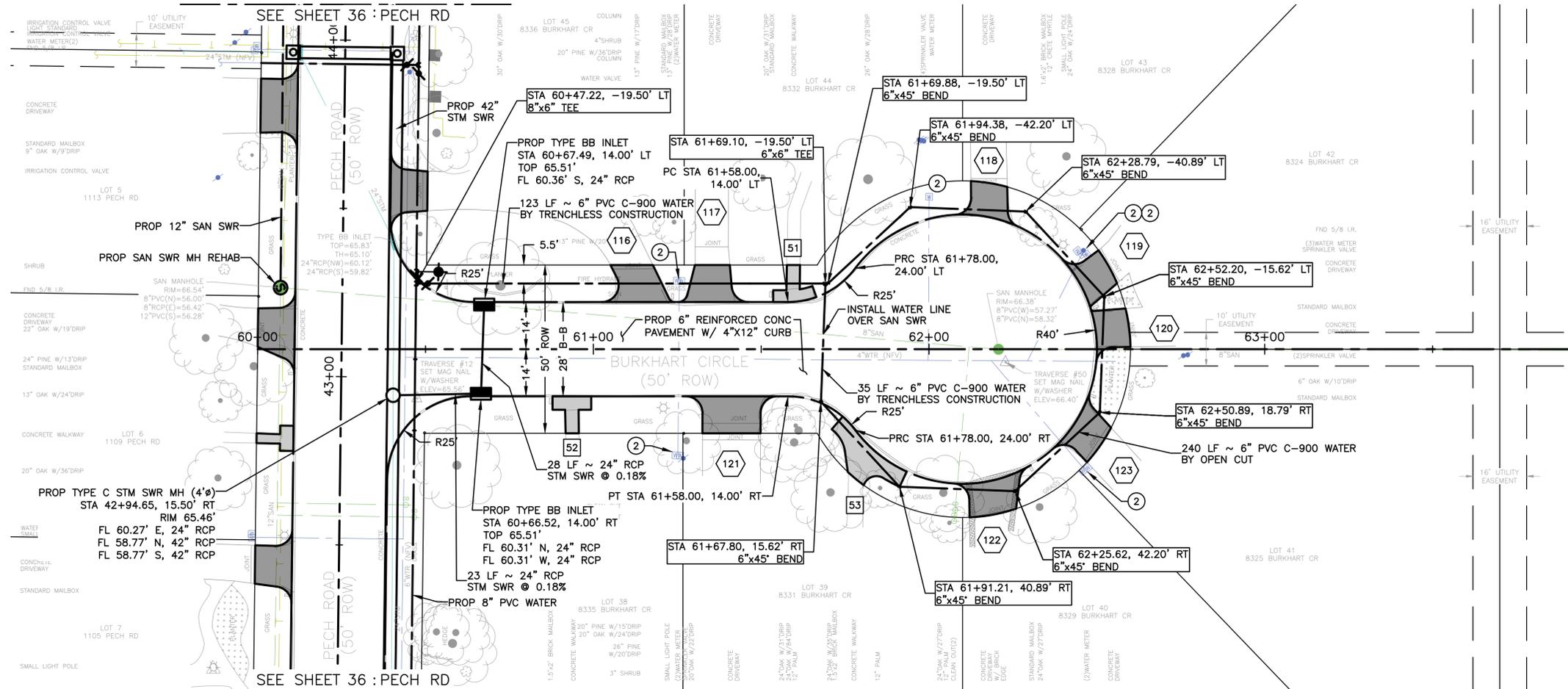
CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

CEDARSPUR DR
 PLAN & PROFILE
 STA 49+50 TO 54+00

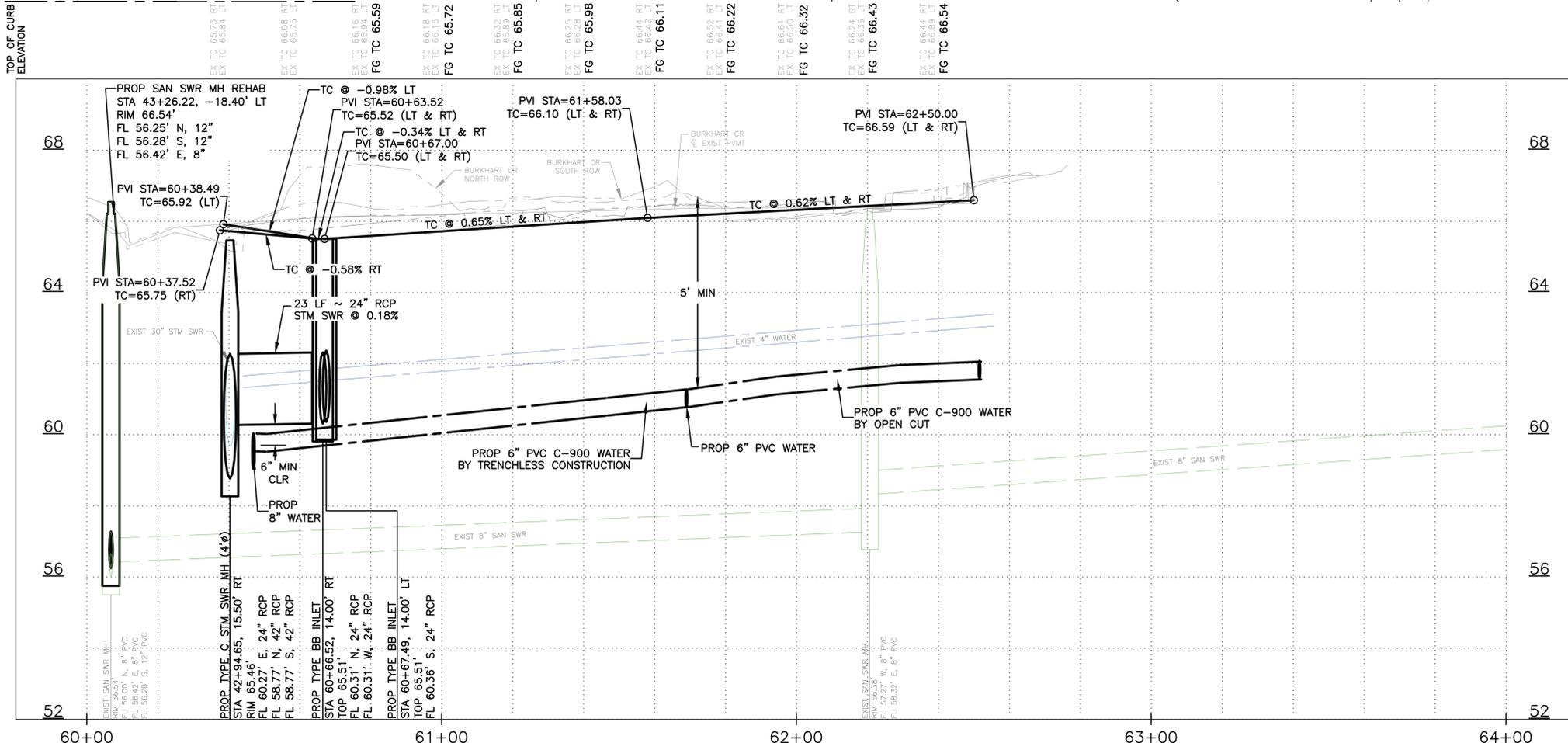
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SURVEY BY: CFA	DWG. No.:
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- LEGEND**
- PROP DRIVEWAY
 - PROP SIDEWALK
 - ① YARD DRAIN, SEE NOTE 1.
 - ② INSTALL 1" SINGLE SERVICE WATER LINE OR 2" WITH A "Y" FOR TWO WATER METERS
 - ③ FIELD VERIFY UTILITY LOCATION, INSTALL WATER LINE UNDER UTILITY
 - Ⓜ DRIVEWAY (SEE SHEET 25-26 FOR DRIVEWAY SUMMARY TABLE)
 - Ⓜ WALKWAY (SEE SHEET 27 FOR WALKWAY SUMMARY TABLE)

- NOTES:**
1. REMOVE AND REPLACE YARD DRAIN, SIZE VARIES, SEE DETAIL SHEET 74. CONTRACTOR TO FIELD VERIFY ALL LOCATIONS.
 2. SANITARY SEWER, FIBER, TELEPHONE, AND GAS LINES ARE SHOWN PER OWNER PROVIDED DRAWINGS AND BASED ON FIELD LOCATIONS. LOCATIONS SHOWN ARE APPROXIMATE. CONTRACTOR TO FIELD VERIFY LOCATION.
 3. ALL PROPOSED WATER SERVICE LINES TO BE INSTALLED OVER THE EXISTING SANITARY SEWER.



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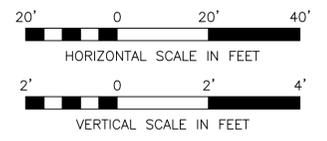
CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

BURKHART CR
 PLAN & PROFILE
 STA 60+00 TO STA 64+00

SUBMITTED: 12/04/23	DESIGNED BY: JMS
SCALE: 1"=20'	DRAWN BY: JS
DATE: 12/04/23	SHEET No.: 39 OF 101
SURVEY BY: CFA	DWG. No.:
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LEGEND

- PROP DRIVEWAY
- PROP SIDEWALK

- 1 YARD DRAIN, SEE NOTE 1.
- 2 INSTALL 1" SINGLE SERVICE WATER LINE OR 2" WITH A "Y" FOR TWO WATER METERS
- 3 FIELD VERIFY UTILITY LOCATION, INSTALL WATER LINE UNDER UTILITY
- # DRIVEWAY (SEE SHEET 25-26 FOR DRIVEWAY SUMMARY TABLE)
- # WALKWAY (SEE SHEET 27 FOR WALKWAY SUMMARY TABLE)

- NOTES:
- REMOVE AND REPLACE YARD DRAIN, SIZE VARIES, SEE DETAIL SHEET 74. CONTRACTOR TO FIELD VERIFY ALL LOCATIONS.
 - SANITARY SEWER, FIBER, TELEPHONE, AND GAS LINES ARE SHOWN PER OWNER PROVIDED DRAWINGS AND BASED ON FIELD LOCATIONS. LOCATIONS SHOWN ARE APPROXIMATE. CONTRACTOR TO FIELD VERIFY LOCATION.
 - ALL PROPOSED WATER SERVICE LINES TO BE INSTALLED OVER THE EXISTING SANITARY SEWER.

NO.	DATE	REVISIONS



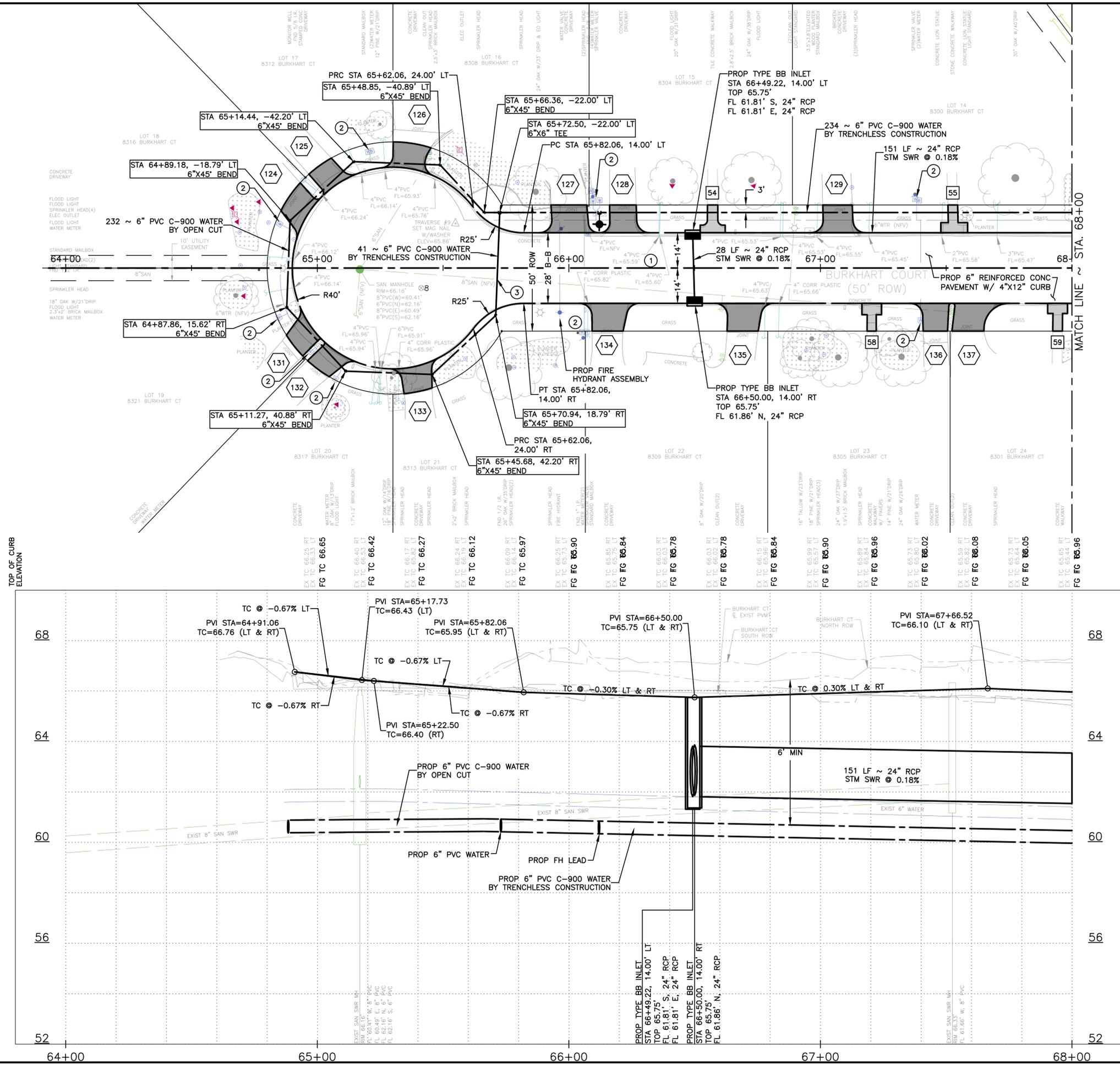
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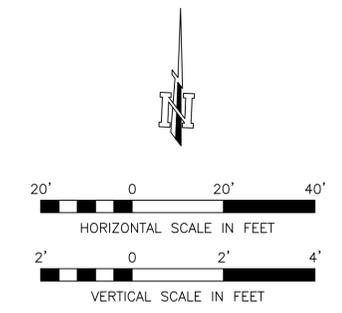
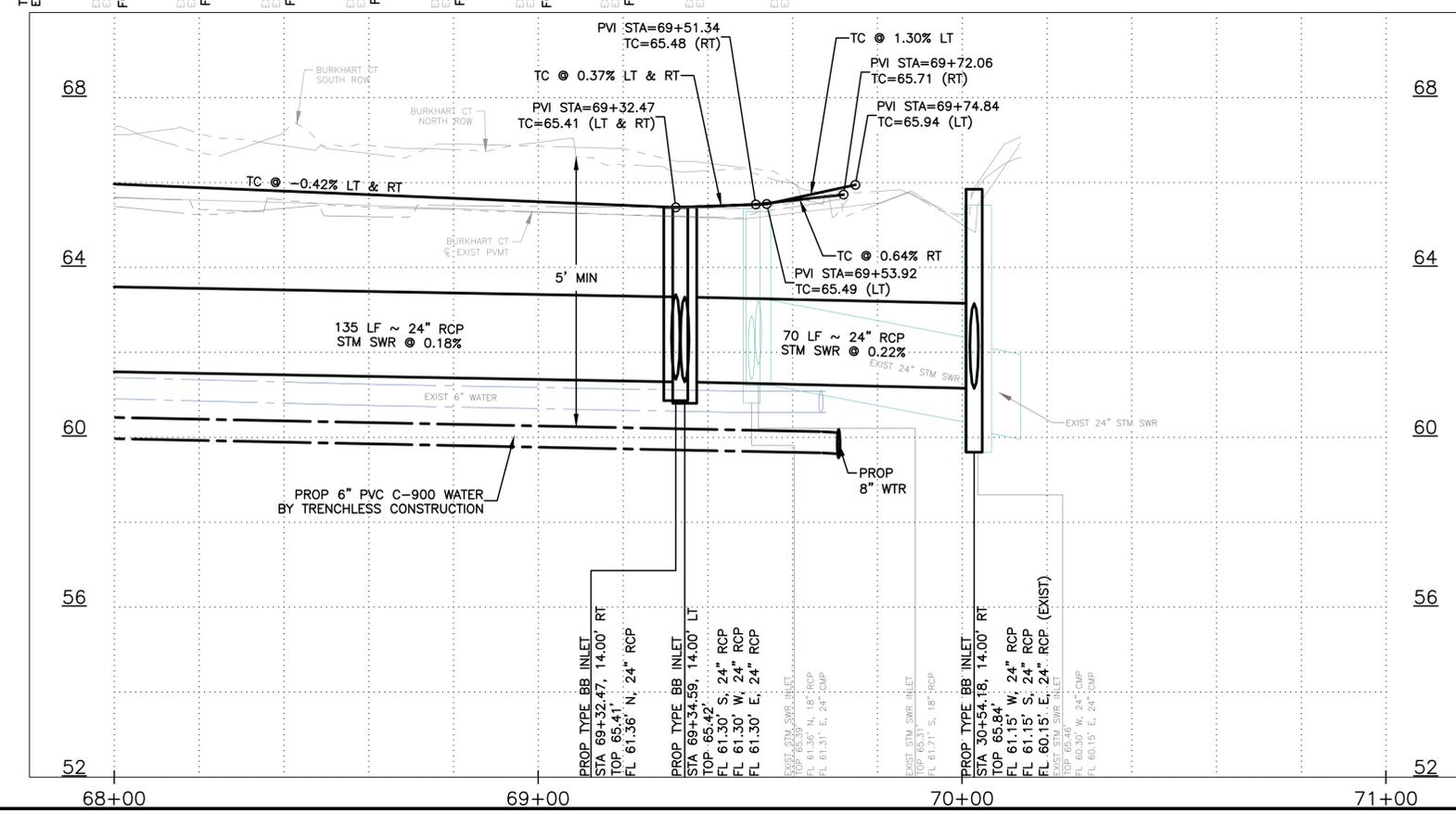
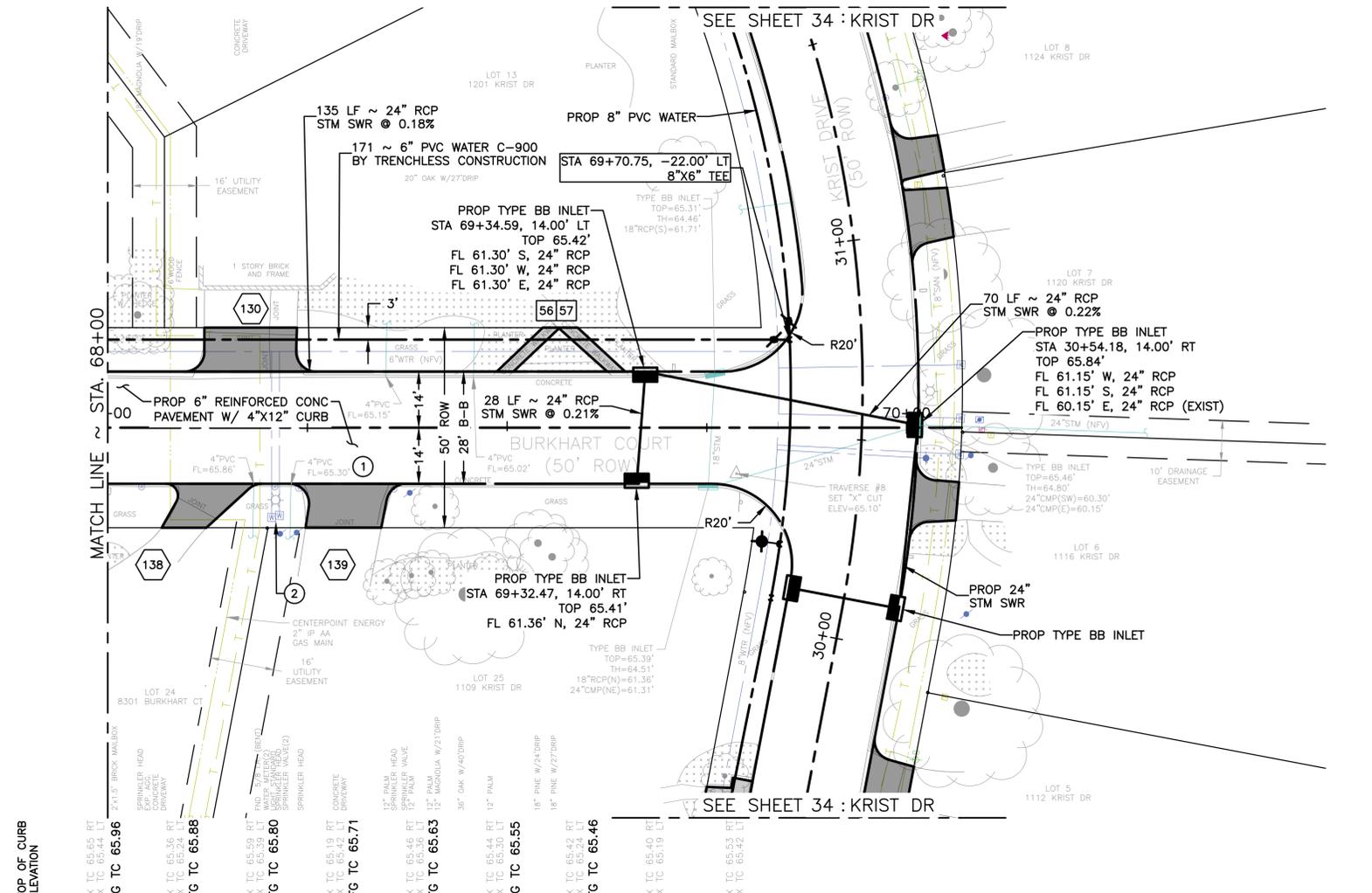
BRIGHTON PLACE RECONSTRUCTION

BURKHART CT
 PLAN & PROFILE
 STA 64+00 TO STA 68+00

SUBMITTED: 12/04/23	DESIGNED BY: JMS
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DATE: 12/04/23	SHEET No.: 40 OF 101
SURVEY BY: CFA	DWG. No.:
F B No.: -	



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- LEGEND**
- PROP DRIVEWAY
 - PROP SIDEWALK
 - ① YARD DRAIN, SEE NOTE 1.
 - ② INSTALL 1" SINGLE SERVICE WATER LINE OR 2" WITH A "Y" FOR TWO WATER METERS
 - ③ FIELD VERIFY UTILITY LOCATION, INSTALL WATER LINE UNDER UTILITY
 - # DRIVEWAY (SEE SHEET 25-26 FOR DRIVEWAY SUMMARY TABLE)
 - # WALKWAY (SEE SHEET 27 FOR WALKWAY SUMMARY TABLE)

- NOTES:**
1. REMOVE AND REPLACE YARD DRAIN. SIZE VARIES, SEE DETAIL SHEET 74. CONTRACTOR TO FIELD VERIFY ALL LOCATIONS.
 2. SANITARY SEWER, FIBER, TELEPHONE, AND GAS LINES ARE SHOWN PER OWNER PROVIDED DRAWINGS AND BASED ON FIELD LOCATIONS. LOCATIONS SHOWN ARE APPROXIMATE. CONTRACTOR TO FIELD VERIFY LOCATION.
 3. ALL PROPOSED WATER SERVICE LINES TO BE INSTALLED OVER THE EXISTING SANITARY SEWER.

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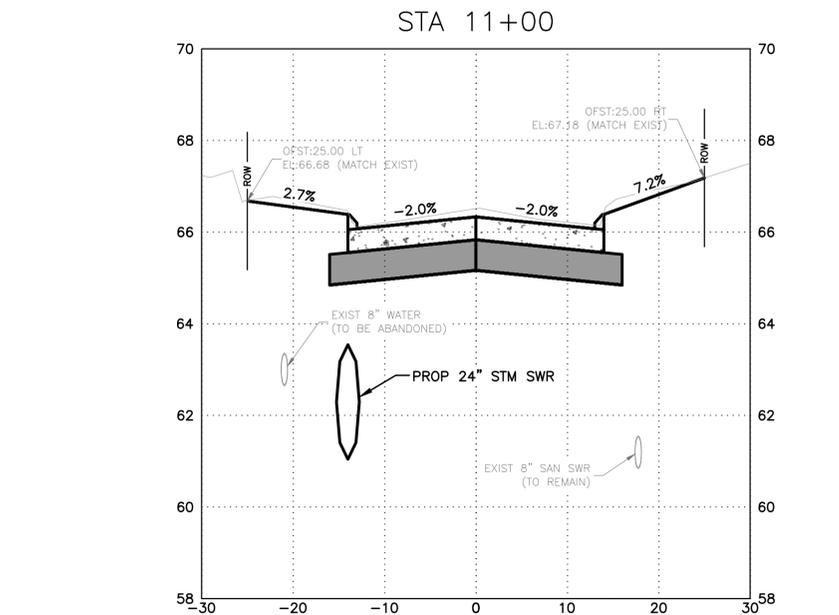
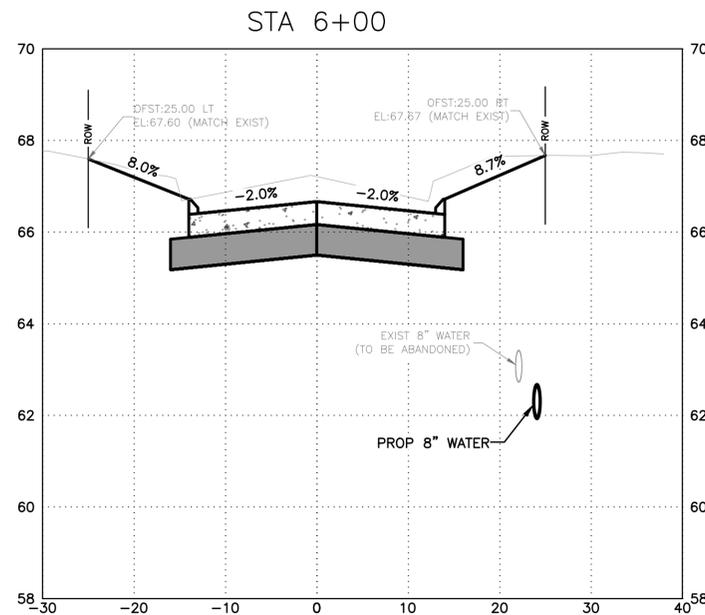
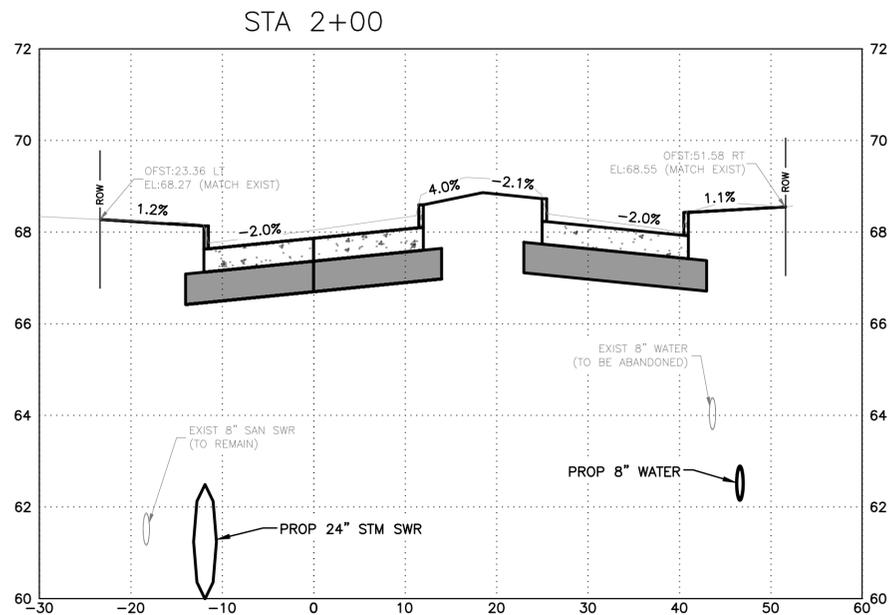
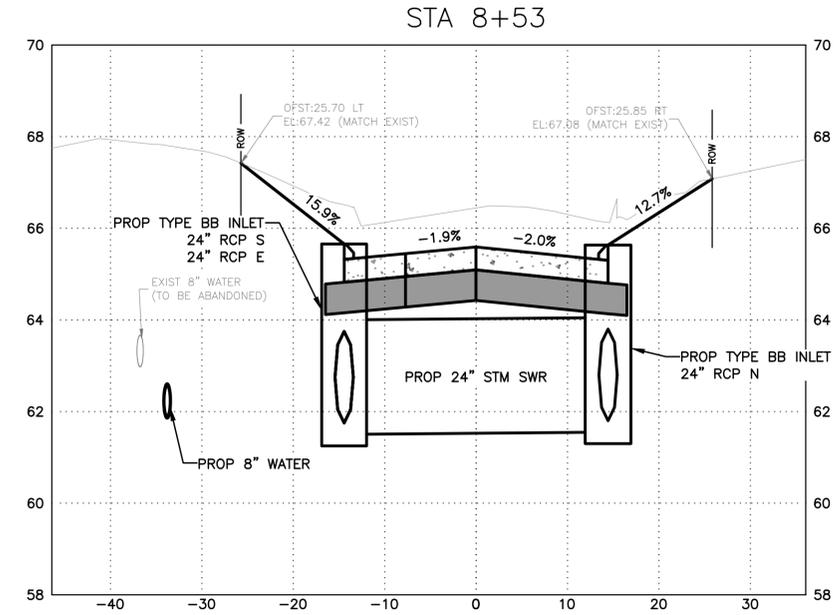
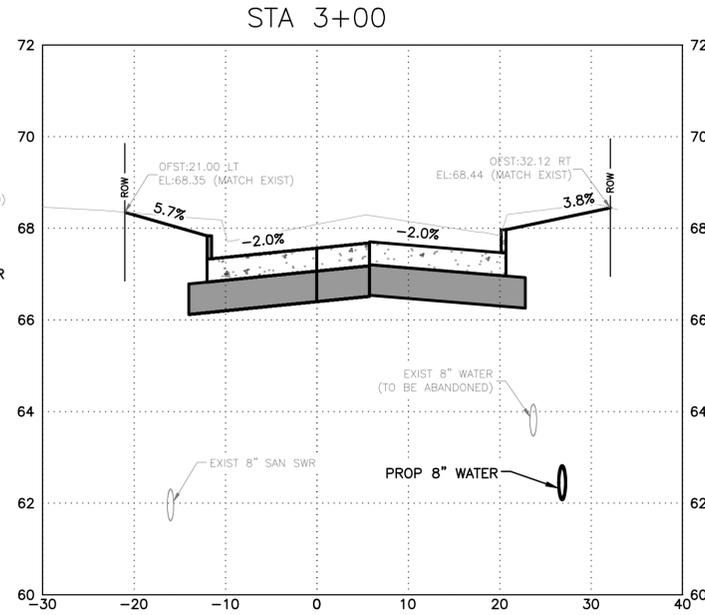
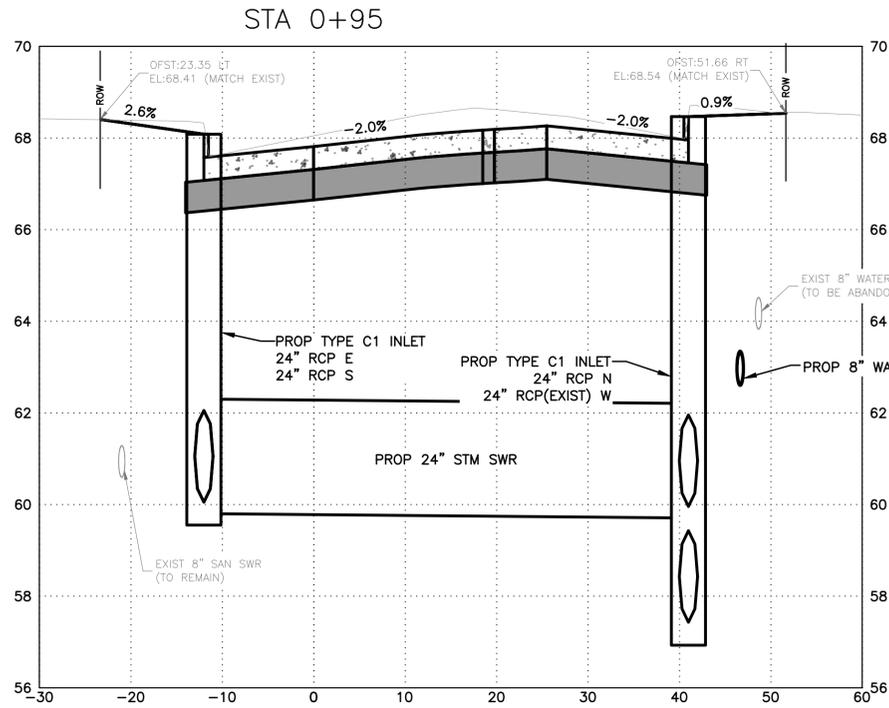
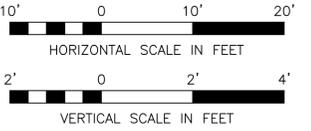
CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

BURKHART CT
 PLAN & PROFILE
 STA 68+00 TO STA 71+00

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DATE: 12/04/23	SHEET No.: 41 OF 101
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F B No.: -	

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LEGEND

	PROP 6" CONC PAVEMENT
	PROP 8" SUBGRADE

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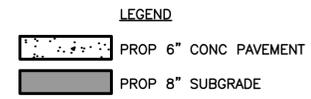
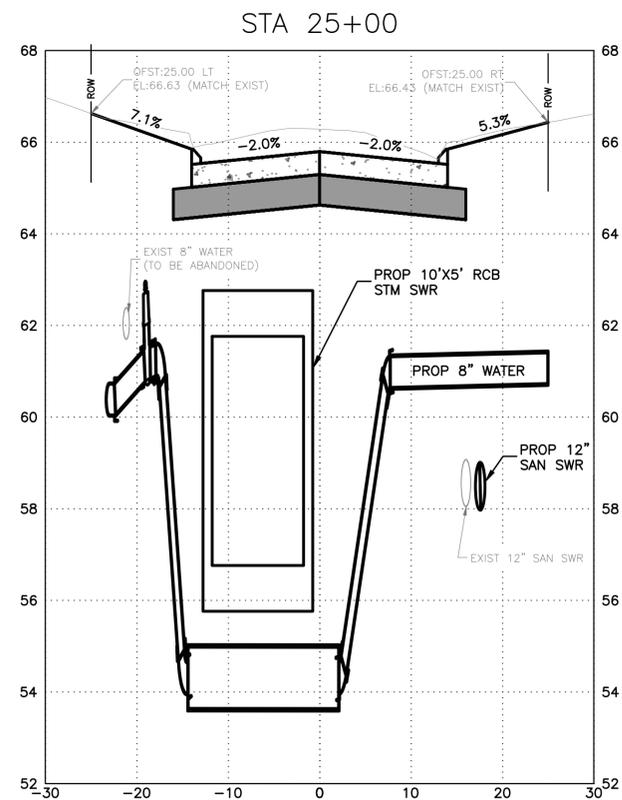
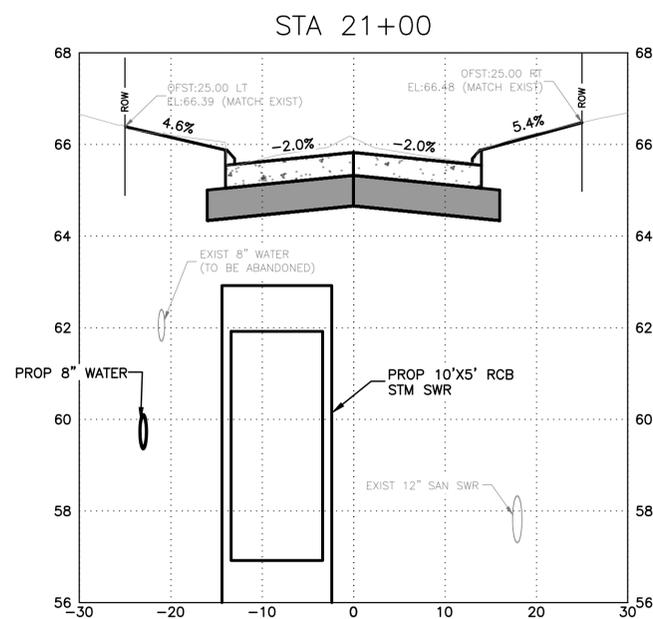
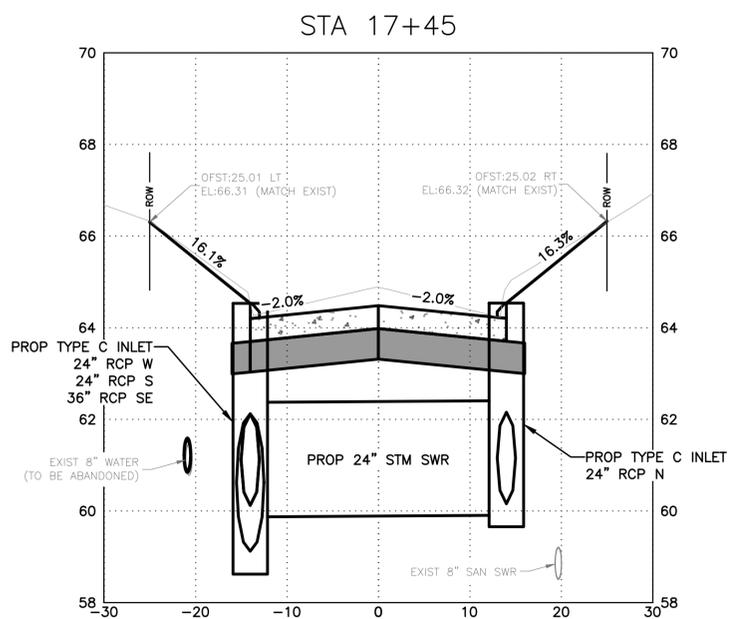
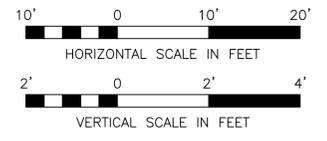
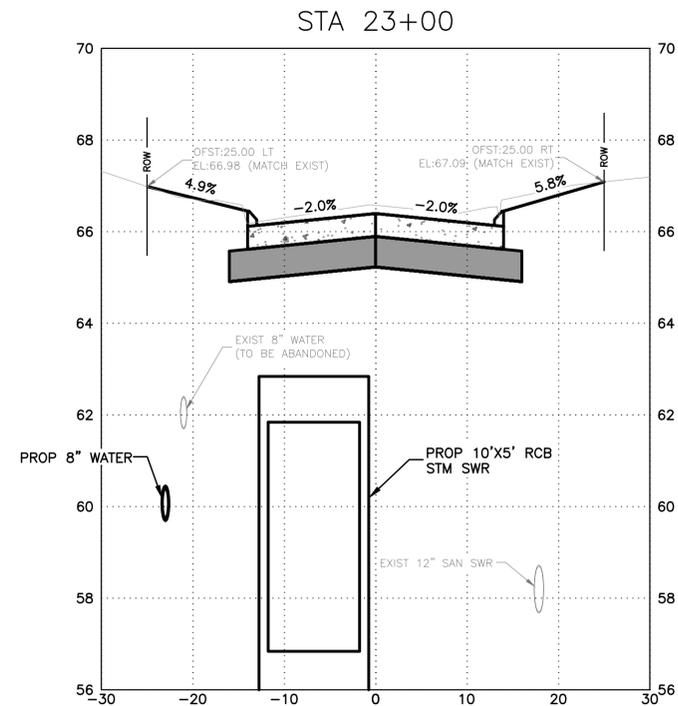
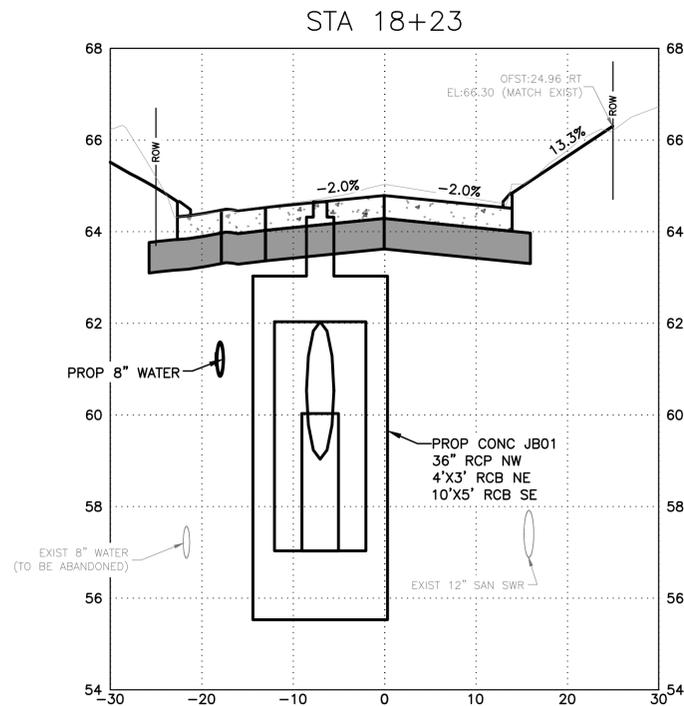
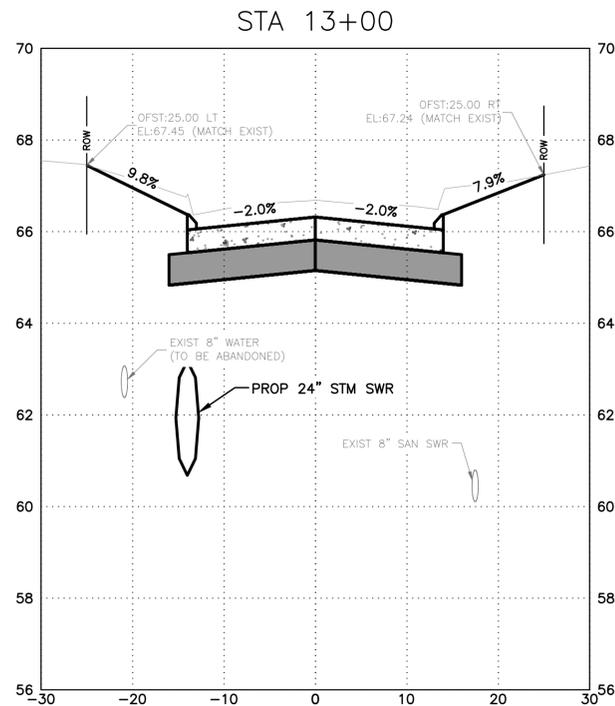
CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

WINNINGHAM LN & KRIST DR
 CROSS SECTIONS (1 OF 4)

SUBMITTED: 12/04/23	DESIGNED BY: JMS
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NO.	DATE	REVISIONS



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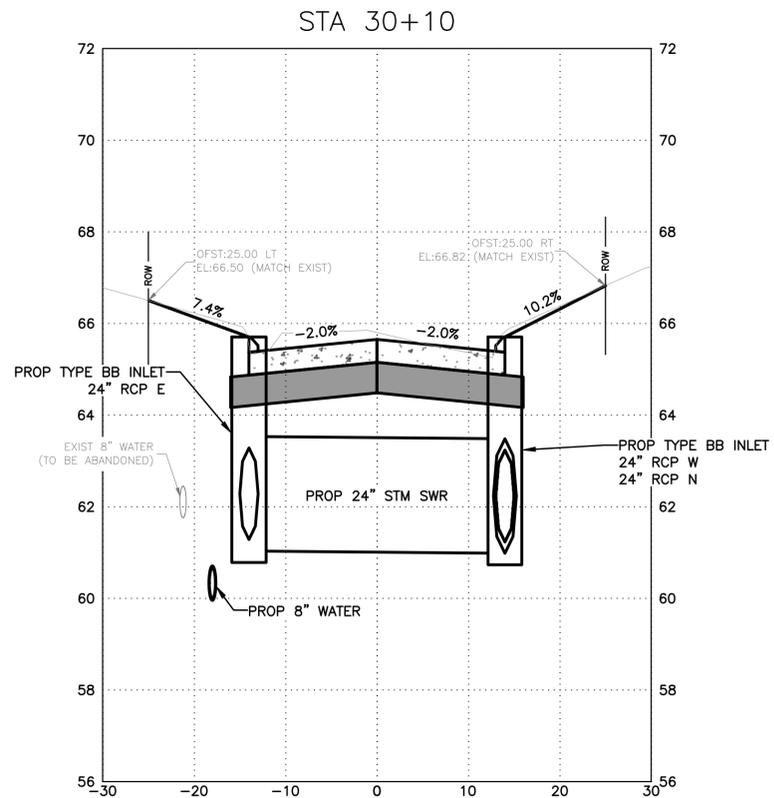
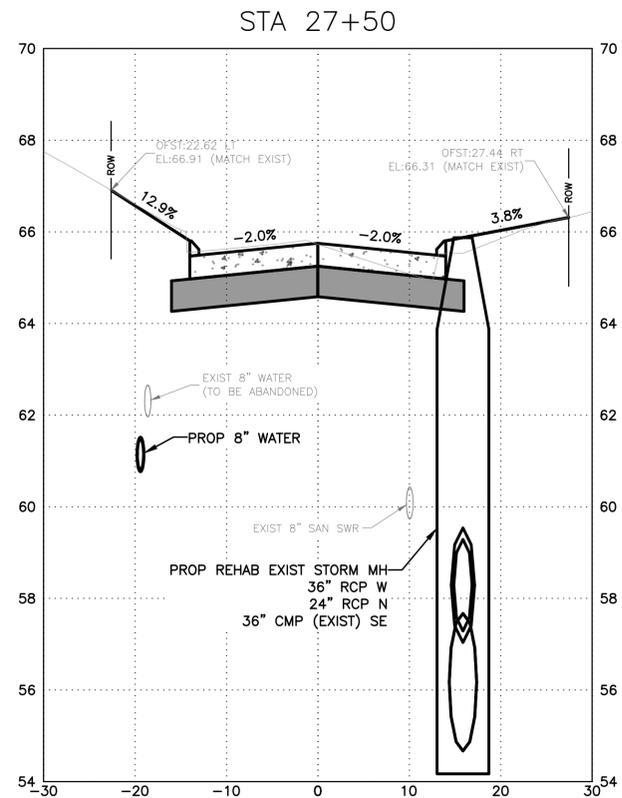
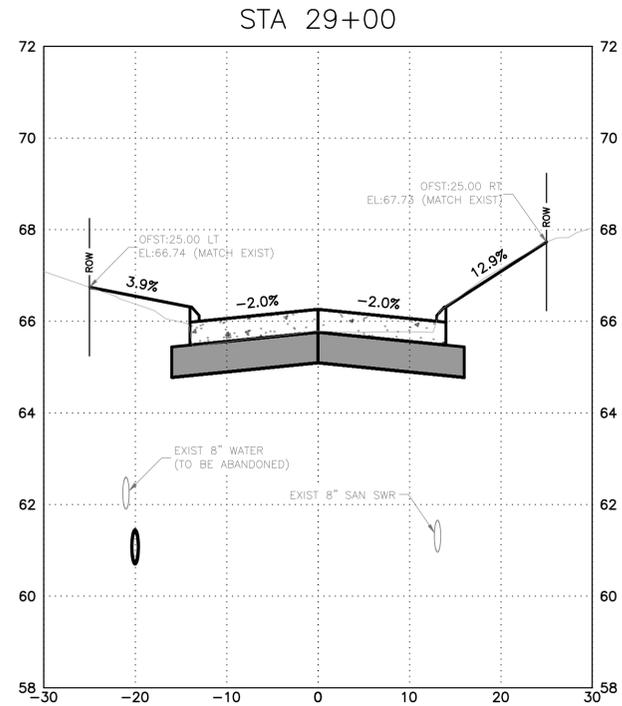
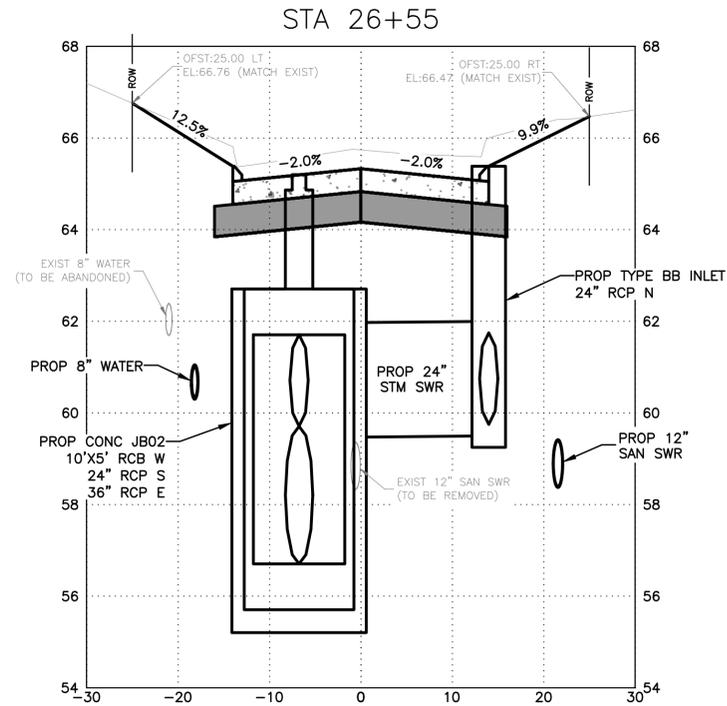
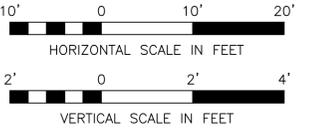
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BRIGHTON PLACE RECONSTRUCTION

WINNINGHAM LN & KRIST DR
 CROSS SECTIONS (2 OF 4)

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SCALE: 1"=10' H, 1"=2' V	DRAWN BY: AA
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LEGEND

	PROP 6" CONC PAVEMENT
	PROP 8" SUBGRADE

NO.	DATE	REVISIONS



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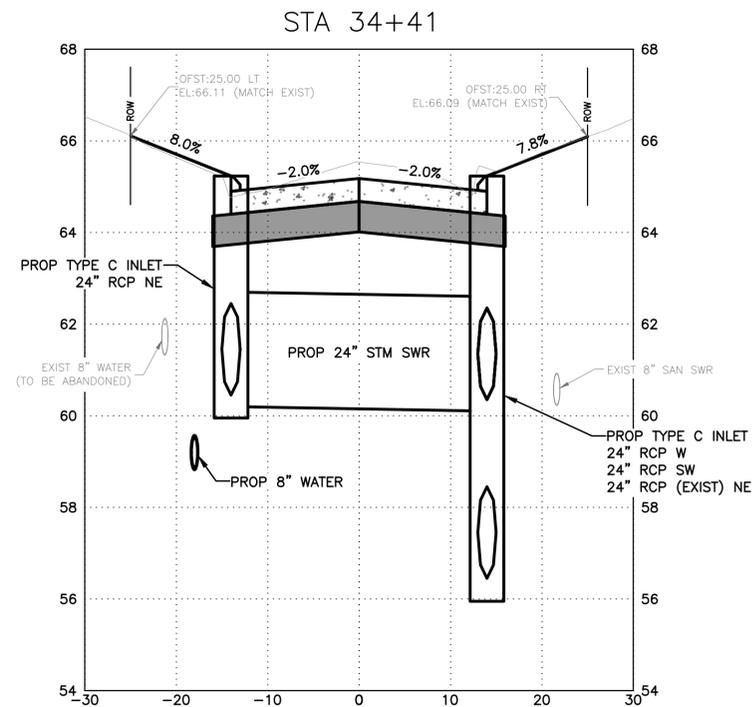
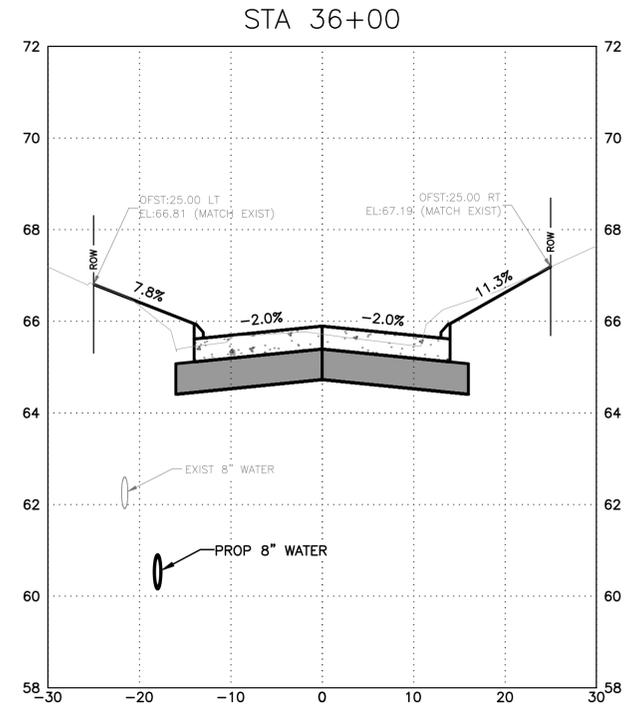
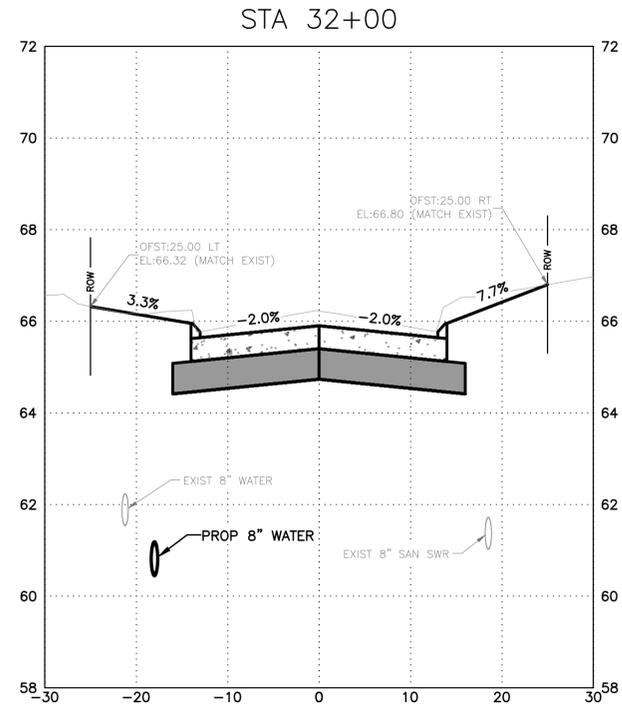
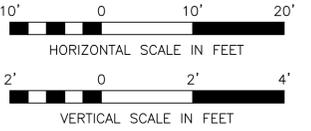
CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

WINNINGHAM LN & KRIST DR
 CROSS SECTIONS (3 OF 4)

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SCALE: 1"=10' H, 1"=2' V	DRAWN BY: AA
DATE: 12/04/23	SHEET No.: 44 OF 101
SURVEY BY: CFA	DWG. No.:
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LEGEND

	PROP 6" CONC PAVEMENT
	PROP 8" SUBGRADE

NO.	DATE	REVISIONS



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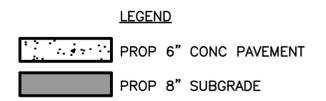
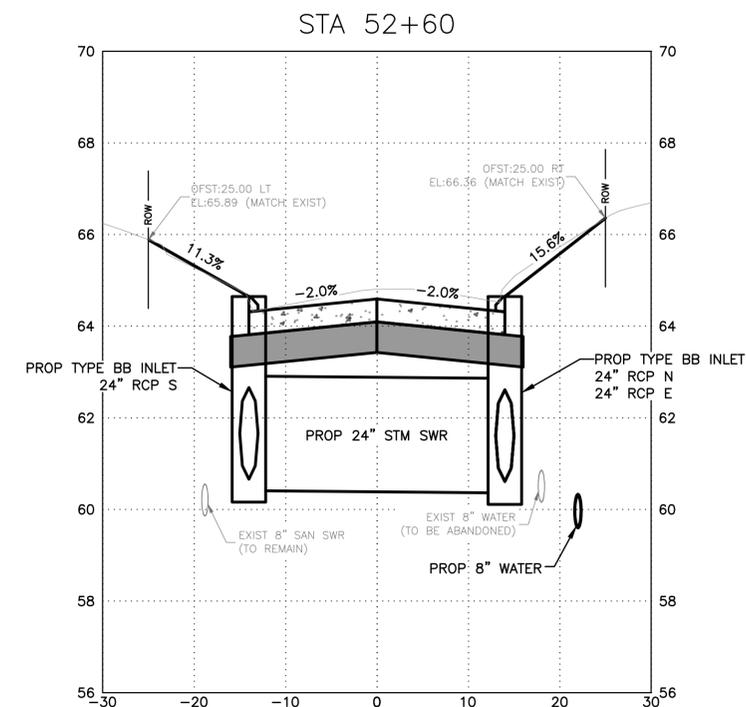
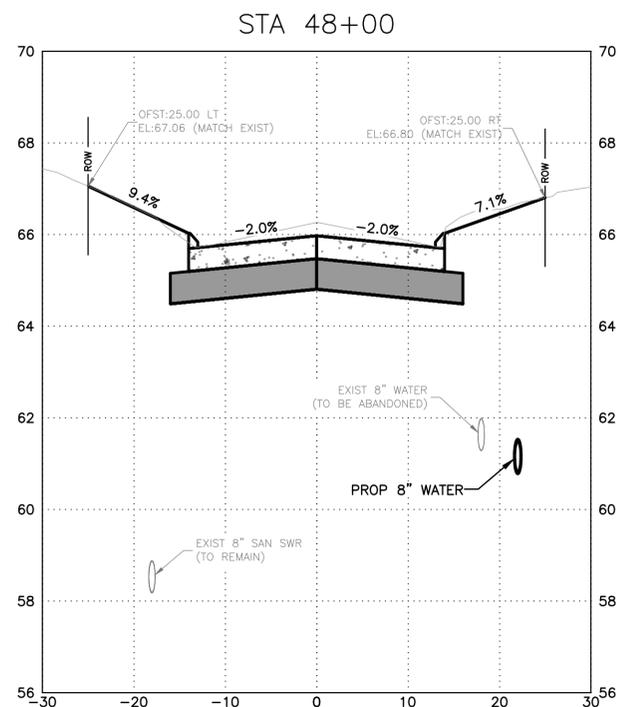
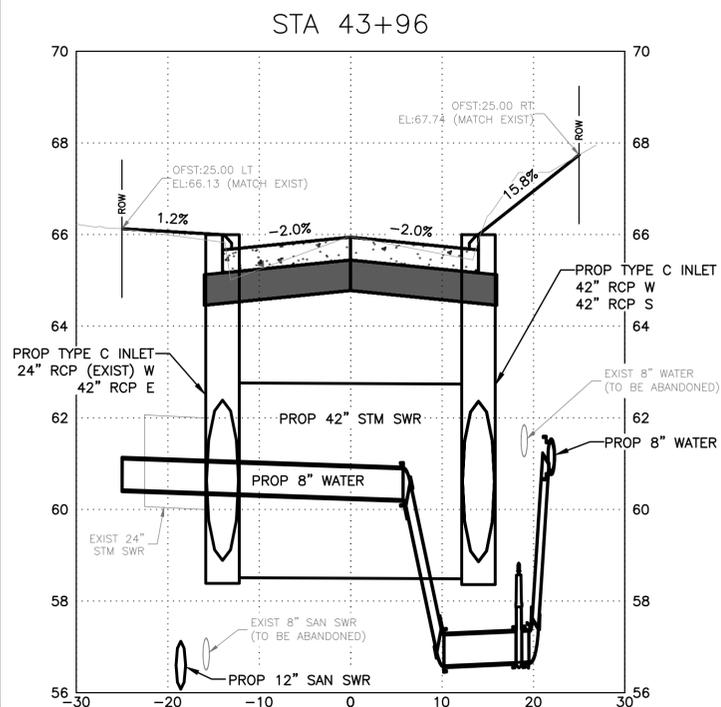
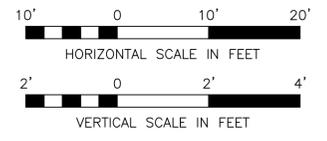
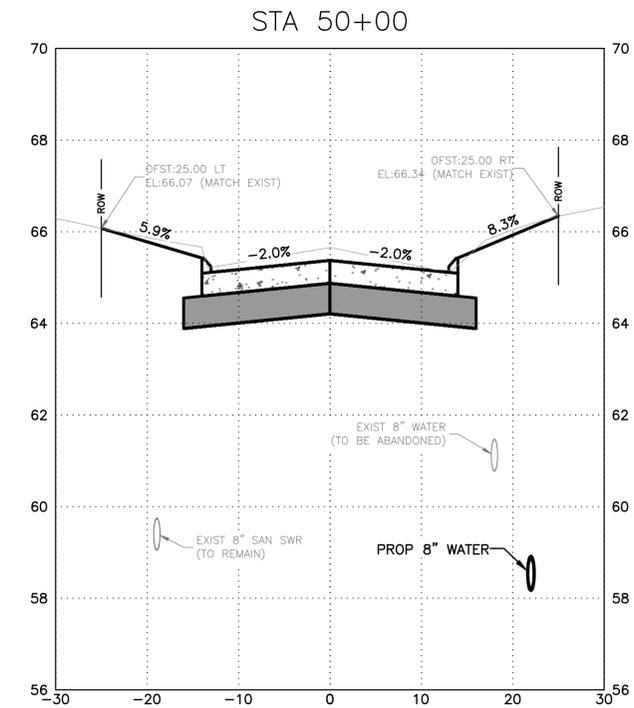
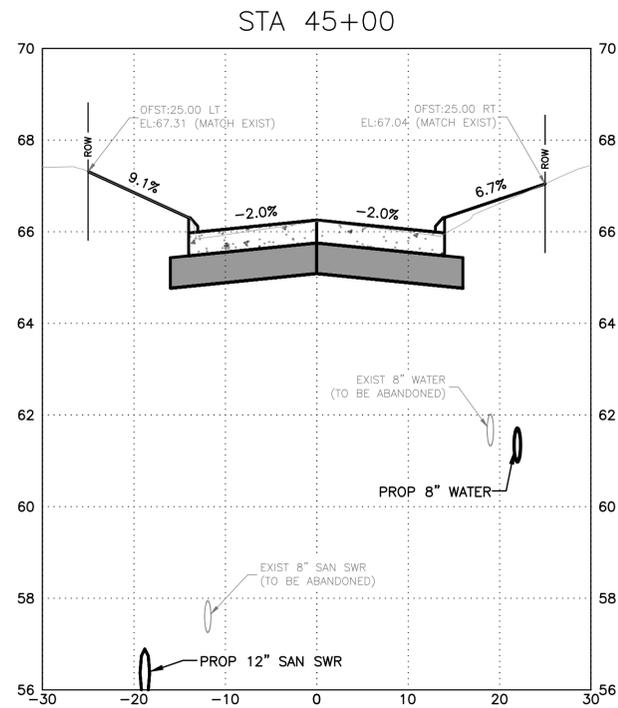
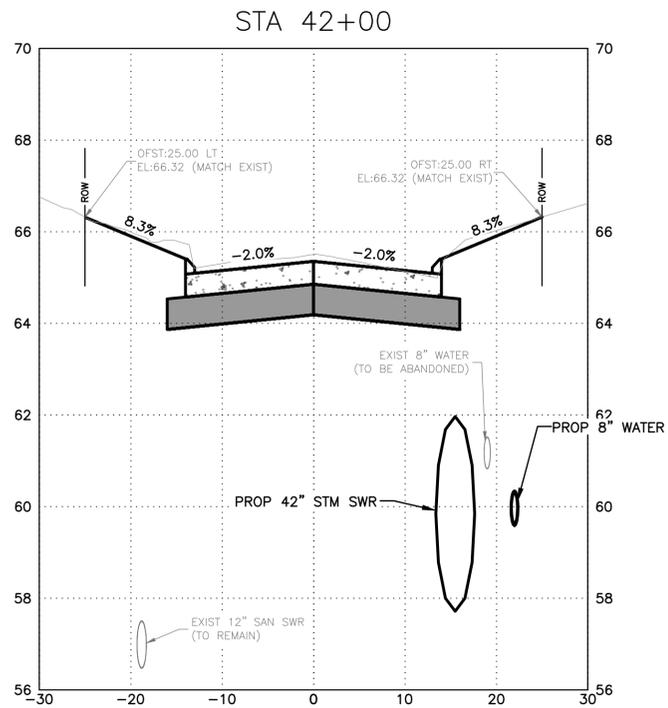
CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

WINNINGHAM LN & KRIST DR
 CROSS SECTIONS (4 OF 4)

SUBMITTED: 12/04/23	DESIGNED BY: JMS
SCALE: 1"=10' H, 1"=2' V	DRAWN BY: AA
DATE: 12/04/23	SHEET No.: 45 OF 101
SURVEY BY: CFA	DWG. No:
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NO.	DATE	REVISIONS



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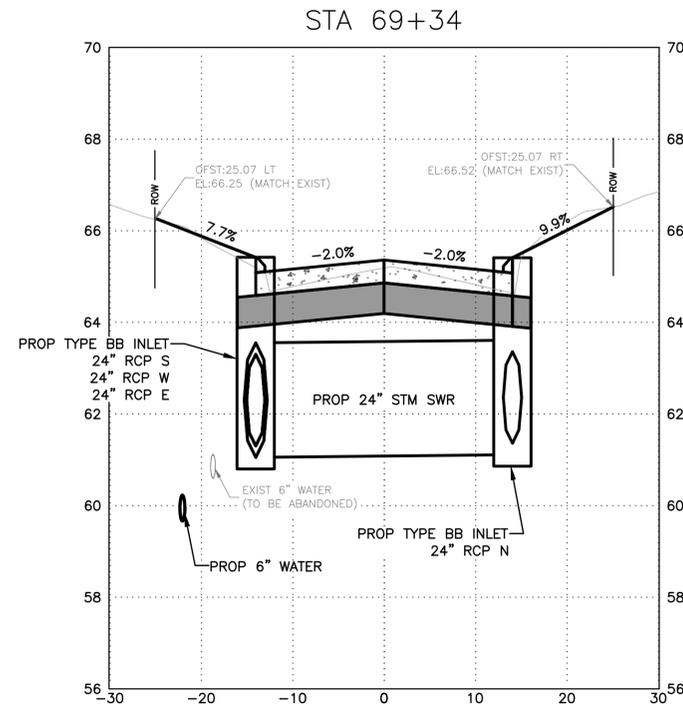
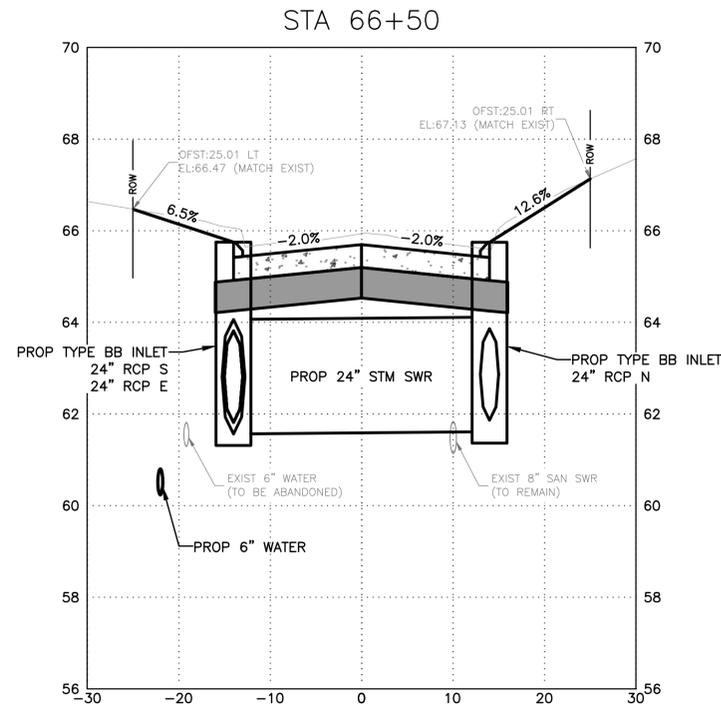
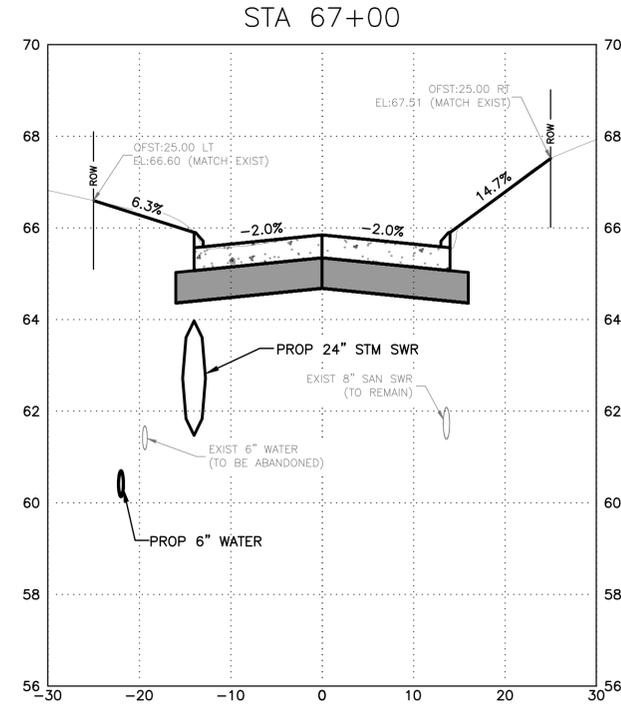
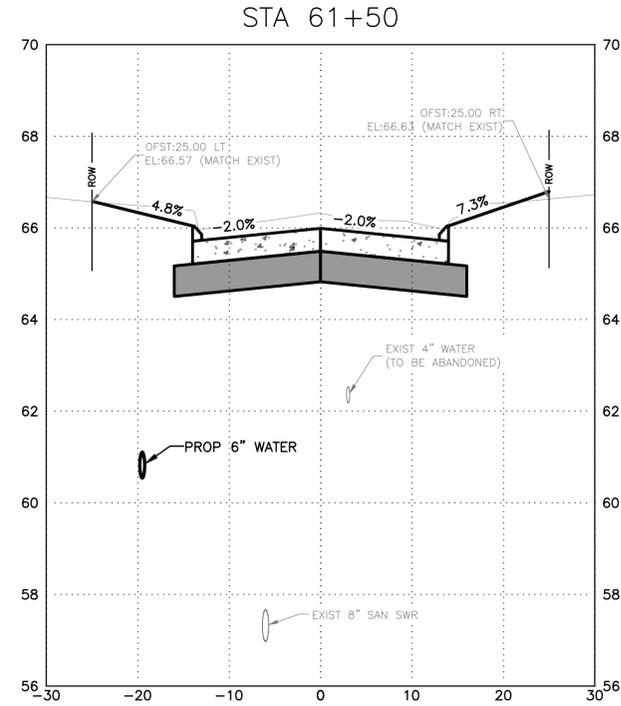
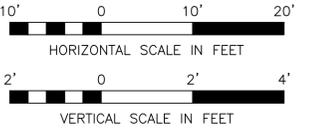
CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

PECH RD & CEDARSPUR DR
 CROSS SECTIONS

SUBMITTED: 12/04/23	DESIGNED BY: JMS
SCALE: 1"=10' H, 1"=2' V	DRAWN BY: AA
DATE: 12/04/23	SHEET No.: 46 OF 101
SURVEY BY: CFA	DWG. No.:
F B No.: -	

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LEGEND

PROP 6" CONC PAVEMENT
PROP 8" SUBGRADE

NO.	DATE	REVISIONS



CobbFendley
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 Land Surveying Firm No. 10046700
 13430 Northwest Freeway, Suite 1100
 Houston, Texas 77040
 713.462.3242 | fax 713.462.3262
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CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

BURKHART CR & BURKHART CT
 CROSS SECTIONS

SUBMITTED: 12/04/23	DESIGNED BY: JMS
SCALE: 1"=10' H, 1"=2' V	DRAWN BY: AA
DATE: 12/04/23	SHEET No.: 47 OF 101
SURVEY BY: CFA	DWG. No.:
F B No.: -	

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CONSTRUCTION NARRATIVE

- COORDINATE CONSTRUCTION SCHEDULE AND OPERATIONS WITH THE CITY, FIRE DEPARTMENT, POLICE DEPARTMENT, SPRING BRANCH INDEPENDENT SCHOOL DISTRICT, AND U.S. POSTAL OFFICE.
- ELIMINATE OR COVER ANY EXISTING SIGNS THAT ARE IN CONFLICT WITH THE TEMPORARY SIGNS AND CONSTRUCTION.
- ESTABLISH STORM WATER POLLUTION PREVENTION PLAN FOR EACH PHASE OF CONSTRUCTION.
- INSTALL LOW PROFILE CONCRETE TRAFFIC BARRIERS (LPCB) WITH REFLECTORS IF THE EXCAVATED AREA DROP EXCEEDS 12-INCHES.
- MAINTAIN INTEGRITY OF DRAINAGE DURING ALL PHASES OF CONSTRUCTION.

PHASE 1 AND 2: WATER AND SANITARY SEWER

- INSTALL PROPOSED WATER MAIN BY TRENCHLESS CONSTRUCTION
- INSTALL PROPOSED SANITARY SEWER MAIN BY TRENCHLESS CONSTRUCTION

PHASE 3: STORM SEWER AND PAVING (WINNINGHAM LN DRAINAGE SYSTEM AND PAVEMENT)

- PLACE ADVANCE WARNING SIGNS AND BARRICADES. SEE TRAFFIC CONTROL PLAN SHEET 90 FOR TYPICAL ONE LANE CLOSURE DETAIL.
- SEE TYPICAL SECTIONS 1 & 2 IN THIS SHEET AND PROVIDE TEMPORARY PAVEMENT, AS NEEDED, TO MAINTAIN 11' TYP. (10' MIN.) LANES.
- REMOVE PAVEMENT ON HALF OF THE STREET, OPEN CUT AND INSTALL THE DRAINAGE SYSTEM BEGINNING WITH THE MAIN TRUNK LINE CONNECTION.
- UPON INSTALLATION OF STORM SEWER, BACKFILL AND BEGIN PAVING ON HALF OF THE STREET, THEN FOLLOWED BY SECOND HALF.

PHASE 4: STORM SEWER AND PAVING (KRIST DR OUTFALLS AND PAVEMENT)

- PLACE ADVANCE WARNING SIGNS AND BARRICADES. SEE TRAFFIC CONTROL PLAN SHEET 90 FOR TYPICAL ONE LANE CLOSURE DETAIL.
- SEE TYPICAL SECTIONS 1 & 2 IN THIS SHEET AND PROVIDE TEMPORARY PAVEMENT, AS NEEDED, TO MAINTAIN 11' TYP. (10' MIN.) LANES.
- REMOVE PAVEMENT ON HALF OF THE STREET, OPEN CUT AND INSTALL THE DRAINAGE SYSTEM BEGINNING WITH THE MAIN TRUNK LINE CONNECTION.
- UPON INSTALLATION OF STORM SEWER, BACKFILL AND BEGIN A TWO-PHASED CONSTRUCTION APPROACH FOR EACH STREET. IN PHASE 1, CONSTRUCT HALF OF THE STREET WITH ONE-WAY TRAFFIC ON THE OTHER SIDE OF THE STREET. IN PHASE 2, CONSTRUCT THE REMAINING HALF OF THE STREET AND MAINTAIN TRAFFIC ON THE NEWLY CONSTRUCTED SIDE OF THE STREET.
- PLACE ADVANCE WARNING SIGNS AND BARRICADES. SEE TRAFFIC CONTROL PLAN SHEET 90 FOR TYPICAL ONE LANE CLOSURE DETAIL.
- SEE TYPICAL SECTION 4 ON THIS SHEET AND PROVIDE TEMPORARY PAVEMENT AS NEEDED TO MAINTAIN MINIMUM LANE WIDTH. REFER TO SHEET 90 FOR ESTIMATED TEMPORARY PAVEMENT AND PAVEMENT SECTION SEQUENCING.
- CONSTRUCT NEW PAVEMENT ON HALF OF THE STREET.
- ADJUST ADVANCE WARNING SIGNS AND BARRICADES. REMOVE EXISTING PAVEMENT AND CONSTRUCT NEW PAVEMENT ON THE OTHER HALF OF THE STREET.
- REMOVE ADVANCE WARNING SIGNS AND BARRICADES.

PHASES 5: STORM SEWER AND PAVING (PECH RD DRAINAGE SYSTEM AND WINNINGHAM LN OUTFALLS)

- PLACE ADVANCE WARNING SIGNS AND BARRICADES. SEE TRAFFIC CONTROL PLAN SHEET 90 FOR TYPICAL ONE LANE CLOSURE DETAIL.
- SEE TYPICAL SECTIONS 3 - "UTILITY CONSTRUCTION" ON THIS SHEET AND PROVIDE TEMPORARY PAVEMENT, AS NEEDED, TO MAINTAIN 13.5' TYP. (10' MIN.) LANES.
- UPON INSTALLATION OF STORM SEWER, BACKFILL AND BEGIN A TWO-PHASED CONSTRUCTION APPROACH FOR EACH STREET. IN PHASE 1, CONSTRUCT HALF OF THE STREET WITH ONE-WAY TRAFFIC ON THE OTHER SIDE OF THE STREET. IN PHASE 2, CONSTRUCT THE REMAINING HALF OF THE STREET AND MAINTAIN TRAFFIC ON THE NEWLY CONSTRUCTED SIDE OF THE STREET.
- PLACE ADVANCE WARNING SIGNS AND BARRICADES. SEE TRAFFIC CONTROL PLAN SHEET 90 FOR TYPICAL ONE LANE CLOSURE DETAIL.
- SEE TYPICAL SECTION 4 ON THIS SHEET AND PROVIDE TEMPORARY PAVEMENT AS NEEDED TO MAINTAIN MINIMUM LANE WIDTH. REFER TO SHEET 90 FOR ESTIMATED TEMPORARY PAVEMENT AND PAVEMENT SECTION SEQUENCING.
- CONSTRUCT NEW PAVEMENT ON HALF OF THE STREET.
- ADJUST ADVANCE WARNING SIGNS AND BARRICADES. REMOVE EXISTING PAVEMENT AND CONSTRUCT NEW PAVEMENT ON THE OTHER HALF OF THE STREET.
- REMOVE ADVANCE WARNING SIGNS AND BARRICADES.

PHASE 6: PAVING (WINNINGHAM LN)

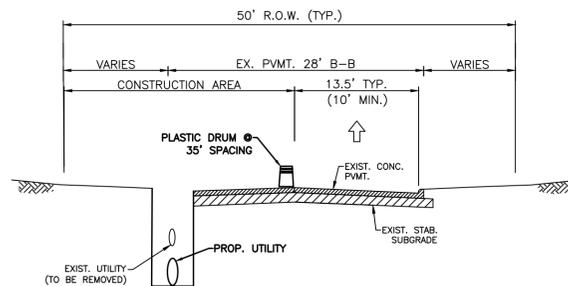
- BEGIN A TWO-PHASED CONSTRUCTION APPROACH FOR EACH STREET. IN PHASE 1, CONSTRUCT HALF OF THE STREET WITH ONE-WAY TRAFFIC ON THE OTHER SIDE OF THE STREET. IN PHASE 2, CONSTRUCT THE REMAINING HALF OF THE STREET AND MAINTAIN TRAFFIC ON THE NEWLY CONSTRUCTED SIDE OF THE STREET.
- PLACE ADVANCE WARNING SIGNS AND BARRICADES. SEE TRAFFIC CONTROL PLAN SHEET 90 FOR TYPICAL ONE LANE CLOSURE DETAIL.
- SEE TYPICAL SECTION 4 ON THIS SHEET AND PROVIDE TEMPORARY PAVEMENT AS NEEDED TO MAINTAIN MINIMUM LANE WIDTH. REFER TO SHEET 90 FOR ESTIMATED TEMPORARY PAVEMENT AND PAVEMENT SECTION SEQUENCING.
- CONSTRUCT NEW PAVEMENT ON HALF OF THE STREET.
- ADJUST ADVANCE WARNING SIGNS AND BARRICADES. REMOVE EXISTING PAVEMENT AND CONSTRUCT NEW PAVEMENT ON THE OTHER HALF OF THE STREET.
- REMOVE ADVANCE WARNING SIGNS AND BARRICADES.

PHASE 7: PAVING (WINNINGHAM LN)

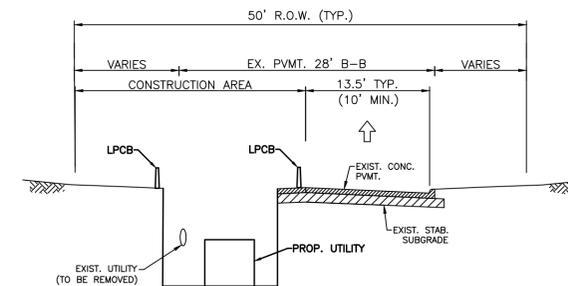
- BEGIN A TWO-PHASED CONSTRUCTION APPROACH FOR EACH STREET. IN PHASE 1, CONSTRUCT HALF OF THE STREET WITH ONE-WAY TRAFFIC ON THE OTHER SIDE OF THE STREET. IN PHASE 2, CONSTRUCT THE REMAINING HALF OF THE STREET AND MAINTAIN TRAFFIC ON THE NEWLY CONSTRUCTED SIDE OF THE STREET.
- PLACE ADVANCE WARNING SIGNS AND BARRICADES. SEE TRAFFIC CONTROL PLAN SHEET 90 FOR TYPICAL ONE LANE CLOSURE DETAIL.
- SEE TYPICAL SECTION 4 ON THIS SHEET AND PROVIDE TEMPORARY PAVEMENT AS NEEDED TO MAINTAIN MINIMUM LANE WIDTH. REFER TO SHEET 90 FOR ESTIMATED TEMPORARY PAVEMENT AND PAVEMENT SECTION SEQUENCING.
- CONSTRUCT NEW PAVEMENT ON HALF OF THE STREET.
- ADJUST ADVANCE WARNING SIGNS AND BARRICADES. REMOVE EXISTING PAVEMENT AND CONSTRUCT NEW PAVEMENT ON THE OTHER HALF OF THE STREET.
- REMOVE ADVANCE WARNING SIGNS AND BARRICADES.

PHASE 8: STORM SEWER AND PAVING (WINNINGHAM LN)

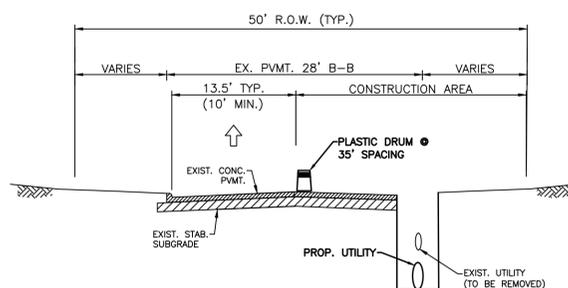
- PLACE ADVANCE WARNING SIGNS AND BARRICADES. SEE TRAFFIC CONTROL PLAN SHEET 90 FOR TYPICAL ONE LANE CLOSURE DETAIL.
- SEE TYPICAL SECTIONS 1 & 2 IN THIS SHEET AND PROVIDE TEMPORARY PAVEMENT, AS NEEDED, TO MAINTAIN 11' TYP. (10' MIN.) LANES.
- REMOVE PAVEMENT ON HALF OF THE STREET, OPEN CUT AND INSTALL THE DRAINAGE SYSTEM BEGINNING WITH THE MAIN TRUNK LINE CONNECTION.
- UPON INSTALLATION OF STORM SEWER, BACKFILL AND BEGIN A TWO-PHASED CONSTRUCTION APPROACH FOR EACH STREET. IN PHASE 1, CONSTRUCT HALF OF THE STREET WITH ONE-WAY TRAFFIC ON THE OTHER SIDE OF THE STREET. IN PHASE 2, CONSTRUCT THE REMAINING HALF OF THE STREET AND MAINTAIN TRAFFIC ON THE NEWLY CONSTRUCTED SIDE OF THE STREET.
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- SEE TYPICAL SECTION 4 ON THIS SHEET AND PROVIDE TEMPORARY PAVEMENT AS NEEDED TO MAINTAIN MINIMUM LANE WIDTH. REFER TO SHEET 90 FOR ESTIMATED TEMPORARY PAVEMENT AND PAVEMENT SECTION SEQUENCING.
- CONSTRUCT NEW PAVEMENT ON HALF OF THE STREET.
- ADJUST ADVANCE WARNING SIGNS AND BARRICADES. REMOVE EXISTING PAVEMENT AND CONSTRUCT NEW PAVEMENT ON THE OTHER HALF OF THE STREET.
- REMOVE ADVANCE WARNING SIGNS AND BARRICADES.



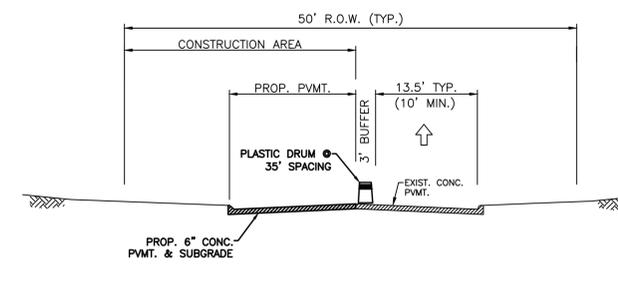
TYPICAL SECTION 1 - UTILITY CONSTRUCTION
WINNINGHAM LN ~ STA 0+00 TO STA 17+50



TYPICAL SECTION 2 - UTILITY CONSTRUCTION
WINNINGHAM LN ~ STA 17+50 TO STA 26+70



TYPICAL SECTION 3 - UTILITY CONSTRUCTION
PECH RD ~ STA 40+00 TO STA 44+00



TYPICAL SECTION 4 - LANE CLOSURE AT SAME ELEVATION
ALL STREETS

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CITY OF SPRING VALLEY VILLAGE

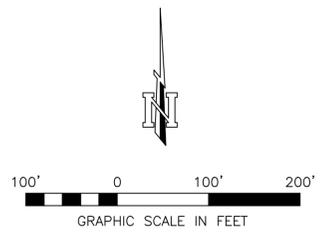
BRIGHTON PLACE RECONSTRUCTION

CONSTRUCTION NARRATIVE
AND TYPICAL SECTIONS

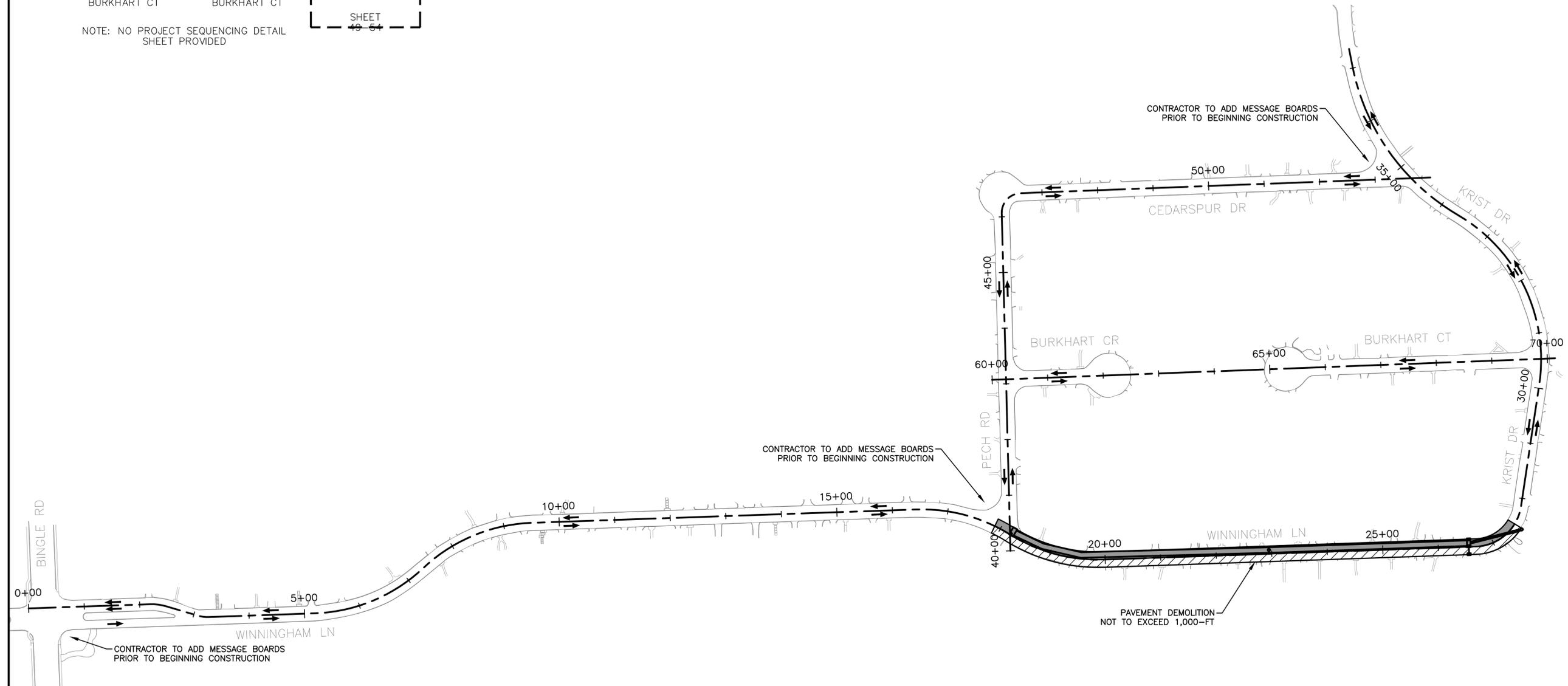
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SCALE: N/A	DRAWN BY: AA
DATE: 12/04/23	SHEET No.: 48 OF 101
SURVEY BY: CFA	DWG. No.:
F B No.: -	

PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5	PHASE 6	PHASE 7	PHASE 8
WATER WINNINGHAM LN KRIST DR PECH RD CEDARSPUR DR BURKHART CR BURKHART CT	SANITARY WINNINGHAM LN KRIST DR PECH RD CEDARSPUR DR BURKHART CR BURKHART CT	STORM AND PAVING WINNINGHAM LN	STORM AND PAVING KRIST DR BURKHART CT	STORM AND PAVING PECH RD CEDARSPUR DR BURKHART CR	STORM AND PAVING WINNINGHAM LN	PAVING WINNINGHAM LN	STORM AND PAVING WINNINGHAM LN

NOTE: NO PROJECT SEQUENCING DETAIL SHEET PROVIDED



SECTION CODE DESCRIPTION:
 # = SUBPHASE NUMBER
 ⇄ = TRAFFIC FLOW DIRECTION
 [Solid Line] = PHASE A
 [Hatched Line] = PHASE B



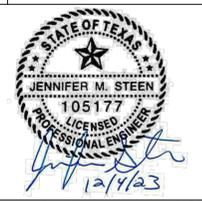
PHASE 3: WINNINGHAM LN PAVING

A TWO-PHASED CONSTRUCTION APPROACH IS TYPICALLY RECOMMENDED FOR EACH STREET. IN PHASE A, CONSTRUCT HALF OF THE STREET WITH ONE-WAY TRAFFIC ON THE OTHER SIDE OF THE STREET. IN PHASE B, CONSTRUCT THE REMAINING HALF OF THE STREET AND MAINTAIN TRAFFIC ON THE NEWLY CONSTRUCTED SIDE OF THE STREET.

- PLACE ADVANCE WARNING SIGNS AND BARRICADES. REFER TO SHEET 90 FOR TRAFFIC CONTROL PLAN AND DETOUR DETAILS.
- SEE TYPICAL SECTIONS 4 ON SHEET 48 AND PROVIDE TEMPORARY PAVEMENT AS NEEDED TO MAINTAIN MINIMUM LANE WIDTH.
- CONTRACTOR TO FIELD VERIFY EXISTING FLs AT CONNECTION TO EXIST STORM SEWER AND CONTRACTOR TO FIELD VERIFY PIPELINE AND EXISTING PRIVATE UTILITY CROSSING ELEVATIONS AND CLEARANCES PRIOR TO CONSTRUCTION OF THE STORM SEWER. NOTIFY ENGINEER OF ANY CONFLICTS IDENTIFIED IN THE FIELD.
- REFER TO SUBPHASE (#) FOR PAVEMENT SEQUENCING. EACH SUBPHASE WILL HAVE AN INDEPENDENT TRAFFIC CONTROL SETUP. ADJUST THE TRAFFIC CONTROL SIGNAGE AS CONSTRUCTION PROGRESSES. CONTRACTOR MAY WORK ON MULTIPLE SUBPHASES CONCURRENTLY PROVIDED THAT ONE-WAY TRAFFIC FLOW IS MAINTAINED.
- CONTRACTOR TO INSTALL SUBGRADE BEFORE CONCRETE PAVEMENT.
- CONSTRUCT NEW PAVEMENT ON HALF OF THE STREET.
- ADJUST ADVANCE WARNING SIGNS AND BARRICADES. REMOVE EXISTING PAVEMENT AND CONSTRUCT NEW PAVEMENT ON THE OTHER HALF OF THE STREET.
- REMOVE ADVANCE WARNING SIGNS AND BARRICADES.
- MAINTAIN DRIVEWAY ACCESS AT ALL TIMES.
- CONTRACTOR TO PROVIDE DOOR HANGERS PRIOR TO BEGINNING CONSTRUCTION.

CONTRACTOR MUST COMPLETELY FINISH THIS PHASE BEFORE STARTING NEW PHASE, INCLUDING ALL FINAL GRADES AND SODDING.

NO.	DATE	REVISIONS



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 TBPELS Engineering Firm No. 274
 Land Surveying Firm No. 10046700
 13430 Northwest Freeway, Suite 1100
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CITY OF SPRING VALLEY VILLAGE

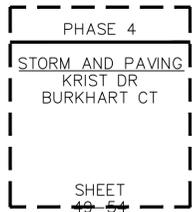
BRIGHTON PLACE RECONSTRUCTION

PROJECT SEQUENCING
(1 OF 6)

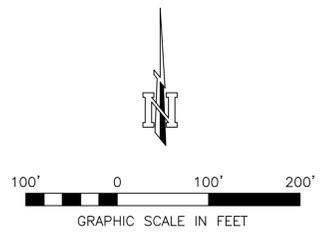
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SCALE: 1"=100'	DRAWN BY: AA
DATE: 12/04/23	SHEET No.: 49 OF 101
SURVEY BY: CFA	DWG. No.:
F. B. No.: -	

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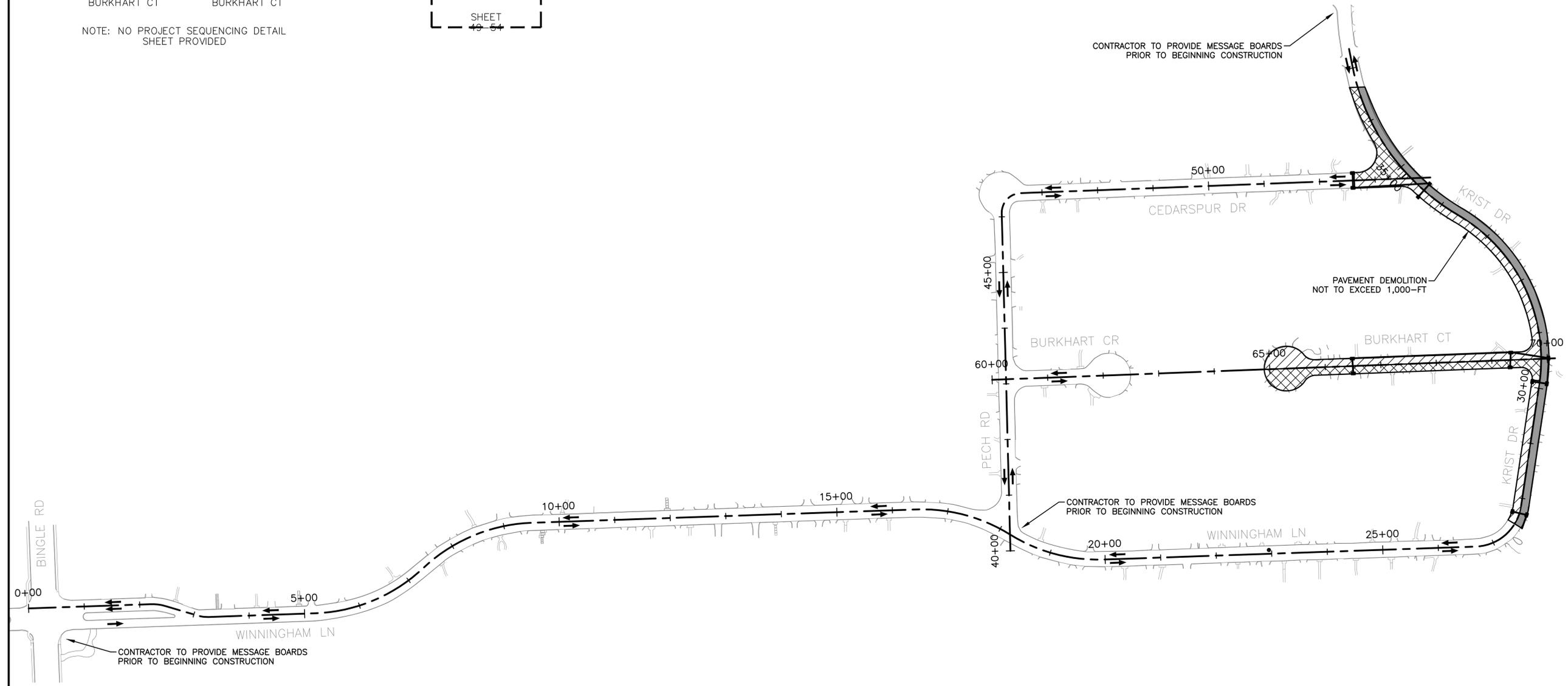
PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5	PHASE 6	PHASE 7	PHASE 8
WATER WINNINGHAM LN KRIST DR PECH RD CEDARSPUR DR BURKHART CR BURKHART CT	SANITARY WINNINGHAM LN KRIST DR PECH RD CEDARSPUR DR BURKHART CR BURKHART CT	STORM AND PAVING WINNINGHAM LN	STORM AND PAVING KRIST DR BURKHART CT	STORM AND PAVING PECH RD CEDARSPUR DR BURKHART CR	STORM AND PAVING WINNINGHAM LN	PAVING WINNINGHAM LN	STORM AND PAVING WINNINGHAM LN



NOTE: NO PROJECT SEQUENCING DETAIL SHEET PROVIDED



SECTION CODE DESCRIPTION:
 # = SUBPHASE NUMBER
 ⇄ = TRAFFIC FLOW DIRECTION
 [Solid Grey] = PHASE A
 [Diagonal Hatching] = PHASE B
 [Cross-hatching] = PHASE C



PHASE 4: KRIST DR AND BURKHART CT PAVING

A TWO-PHASED CONSTRUCTION APPROACH IS TYPICALLY RECOMMENDED FOR EACH STREET. IN PHASE A, CONSTRUCT HALF OF THE STREET WITH ONE-WAY TRAFFIC ON THE OTHER SIDE OF THE STREET. IN PHASE B, CONSTRUCT THE REMAINING HALF OF THE STREET AND MAINTAIN TRAFFIC ON THE NEWLY CONSTRUCTED SIDE OF THE STREET.

- PLACE ADVANCE WARNING SIGNS AND BARRICADES. REFER TO SHEET 90 FOR TRAFFIC CONTROL PLAN AND DETOUR DETAILS.
- SEE TYPICAL SECTIONS 4 ON SHEET 48 AND PROVIDE TEMPORARY PAVEMENT AS NEEDED TO MAINTAIN MINIMUM LANE WIDTH.
- CONTRACTOR TO FIELD VERIFY EXISTING FLs AT CONNECTION TO EXIST STORM SEWER AND CONTRACTOR TO FIELD VERIFY PIPELINE AND EXISTING PRIVATE UTILITY CROSSING ELEVATIONS AND CLEARANCES PRIOR TO CONSTRUCTION OF THE STORM SEWER. NOTIFY ENGINEER OF ANY CONFLICTS IDENTIFIED IN THE FIELD.
- REFER TO SUBPHASE (#) FOR PAVEMENT SEQUENCING. EACH SUBPHASE WILL HAVE AN INDEPENDENT TRAFFIC CONTROL SETUP. ADJUST THE TRAFFIC CONTROL SIGNAGE AS CONSTRUCTION PROGRESSES. CONTRACTOR MAY WORK ON MULTIPLE SUBPHASES CONCURRENTLY PROVIDED THAT ONE-WAY TRAFFIC FLOW IS MAINTAINED.
- CONTRACTOR TO INSTALL SUBGRADE BEFORE CONCRETE PAVEMENT.
- CONSTRUCT NEW PAVEMENT ON HALF OF THE STREET.
- ADJUST ADVANCE WARNING SIGNS AND BARRICADES. REMOVE EXISTING PAVEMENT AND CONSTRUCT NEW PAVEMENT ON THE OTHER HALF OF THE STREET.
- REMOVE ADVANCE WARNING SIGNS AND BARRICADES.
- MAINTAIN DRIVEWAY ACCESS AT ALL TIMES.
- CONTRACTOR TO PROVIDE DOOR HANGERS PRIOR TO BEGINNING CONSTRUCTION.

CONTRACTOR MUST COMPLETELY FINISH THIS PHASE BEFORE STARTING NEW PHASE, INCLUDING ALL FINAL GRADES AND SODDING.

NO.	DATE	REVISIONS



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CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

PROJECT SEQUENCING
(2 OF 6)

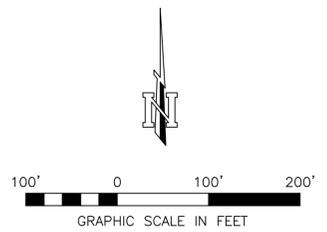
SUBMITTED: 12/04/23	DESIGNED BY: JMS
SCALE: 1"=100'	DRAWN BY: AA
DATE: 12/04/23	SHEET No.: 50 OF 101
SURVEY BY: CFA	DWG. No.:
F B No.: -	

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PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5	PHASE 6	PHASE 7	PHASE 8
WATER WINNINGHAM LN KRIST DR PECH RD CEDARSPUR DR BURKHART CR BURKHART CT	SANITARY WINNINGHAM LN KRIST DR PECH RD CEDARSPUR DR BURKHART CR BURKHART CT	STORM AND PAVING WINNINGHAM LN	STORM AND PAVING KRIST DR BURKHART CT	STORM AND PAVING PECH RD CEDARSPUR DR BURKHART CR	STORM AND PAVING WINNINGHAM LN	PAVING WINNINGHAM LN	STORM AND PAVING WINNINGHAM LN

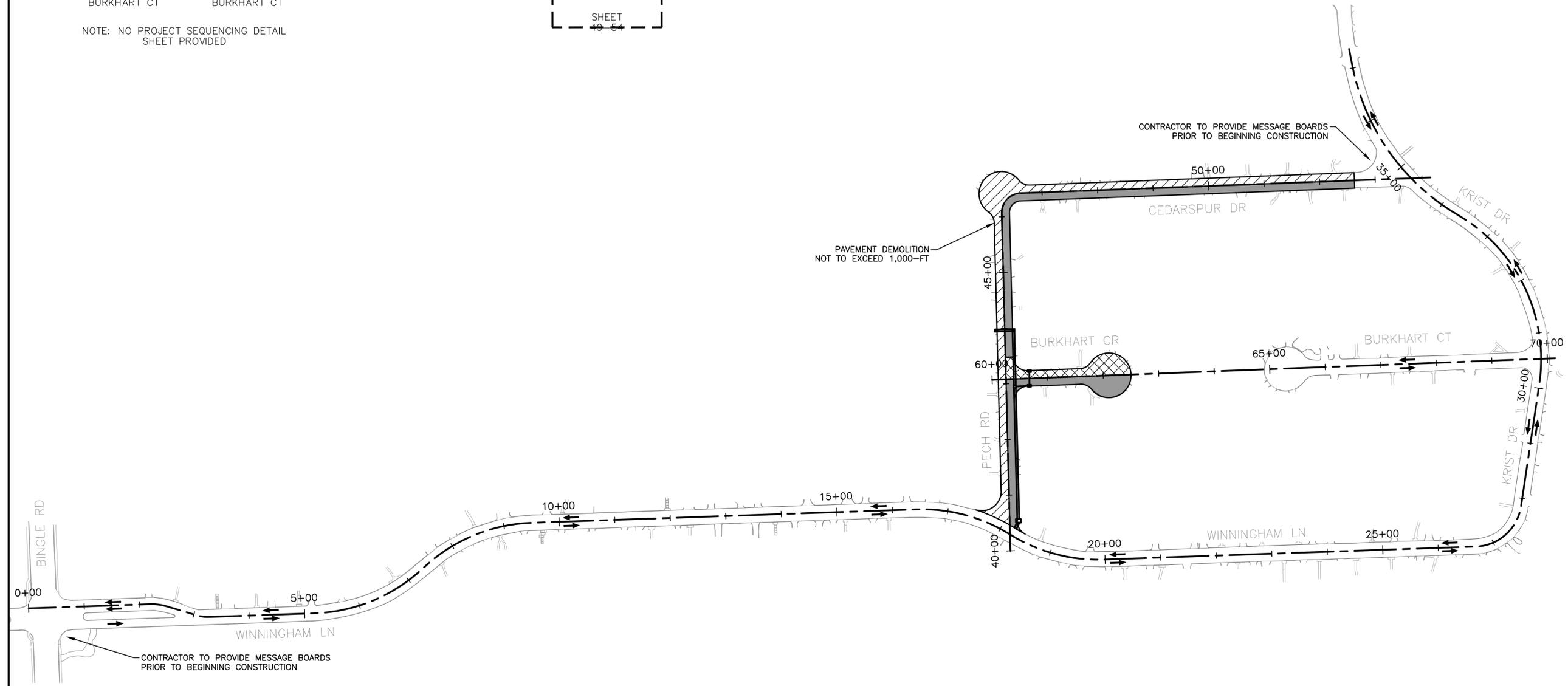
SHEET
49-54

NOTE: NO PROJECT SEQUENCING DETAIL SHEET PROVIDED



SECTION CODE DESCRIPTION:

- # = SUBPHASE NUMBER
- ↔ = TRAFFIC FLOW DIRECTION
- [Solid Grey] = PHASE A
- [Diagonal Hatching] = PHASE B
- [Cross-hatching] = PHASE C



PHASE 5: PECH RD, CEDARSPUR DR, AND BURKHART CR PAVING

A TWO-PHASED CONSTRUCTION APPROACH IS TYPICALLY RECOMMENDED FOR EACH STREET. IN PHASE A, CONSTRUCT HALF OF THE STREET WITH ONE-WAY TRAFFIC ON THE OTHER SIDE OF THE STREET. IN PHASE B, CONSTRUCT THE REMAINING HALF OF THE STREET AND MAINTAIN TRAFFIC ON THE NEWLY CONSTRUCTED SIDE OF THE STREET.

- PLACE ADVANCE WARNING SIGNS AND BARRICADES. REFER TO SHEET 90 FOR TRAFFIC CONTROL PLAN AND DETOUR DETAILS.
- SEE TYPICAL SECTIONS 4 ON SHEET 48 AND PROVIDE TEMPORARY PAVEMENT AS NEEDED TO MAINTAIN MINIMUM LANE WIDTH.
- CONTRACTOR TO FIELD VERIFY EXISTING FLs AT CONNECTION TO EXIST STORM SEWER AND CONTRACTOR TO FIELD VERIFY PIPELINE AND EXISTING PRIVATE UTILITY CROSSING ELEVATIONS AND CLEARANCES PRIOR TO CONSTRUCTION OF THE STORM SEWER. NOTIFY ENGINEER OF ANY CONFLICTS IDENTIFIED IN THE FIELD.
- REFER TO SUBPHASE (#) FOR PAVEMENT SEQUENCING. EACH SUBPHASE WILL HAVE AN INDEPENDENT TRAFFIC CONTROL SETUP. ADJUST THE TRAFFIC CONTROL SIGNAGE AS CONSTRUCTION PROGRESSES. CONTRACTOR MAY WORK ON MULTIPLE SUBPHASES CONCURRENTLY PROVIDED THAT ONE-WAY TRAFFIC FLOW IS MAINTAINED.
- CONTRACTOR TO INSTALL SUBGRADE BEFORE CONCRETE PAVEMENT.
- CONSTRUCT NEW PAVEMENT ON HALF OF THE STREET.
- ADJUST ADVANCE WARNING SIGNS AND BARRICADES. REMOVE EXISTING PAVEMENT AND CONSTRUCT NEW PAVEMENT ON THE OTHER HALF OF THE STREET.
- REMOVE ADVANCE WARNING SIGNS AND BARRICADES.
- MAINTAIN DRIVEWAY ACCESS AT ALL TIMES.
- CONTRACTOR TO PROVIDE DOOR HANGERS PRIOR TO BEGINNING CONSTRUCTION.

CONTRACTOR MUST COMPLETELY FINISH THIS PHASE BEFORE STARTING NEW PHASE, INCLUDING ALL FINAL GRADES AND SODDING.

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CITY OF SPRING VALLEY VILLAGE

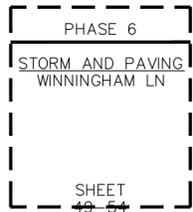
BRIGHTON PLACE RECONSTRUCTION

PROJECT SEQUENCING
(3 OF 6)

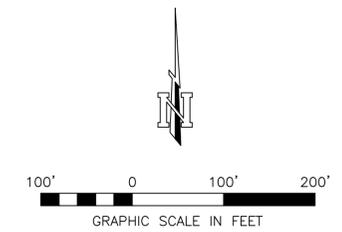
SUBMITTED: 12/04/23	DESIGNED BY: JMS
SCALE: 1"=100'	DRAWN BY: AA
DATE: 12/04/23	SHEET No.: 51 OF 101
SURVEY BY: CFA	DWG. No.:
F B No.: -	

D:\PROJECTS\2022\12056_CITY_OF_SPRING_VALLEY_VILLAGE\01_BRIGHTON_PLACE_RECONSTRUCTION\400_CAD\412_MUN\ SHEETS\2212-056_TCP_PROJ_SEQUENCE.DWG

PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5	PHASE 6	PHASE 7	PHASE 8
WATER WINNINGHAM LN KRIST DR PECH RD CEDARSPUR DR BURKHART CR BURKHART CT	SANITARY WINNINGHAM LN KRIST DR PECH RD CEDARSPUR DR BURKHART CR BURKHART CT	STORM AND PAVING WINNINGHAM LN	STORM AND PAVING KRIST DR BURKHART CT	STORM AND PAVING PECH RD CEDARSPUR DR BURKHART CR	STORM AND PAVING WINNINGHAM LN	PAVING WINNINGHAM LN	STORM AND PAVING WINNINGHAM LN

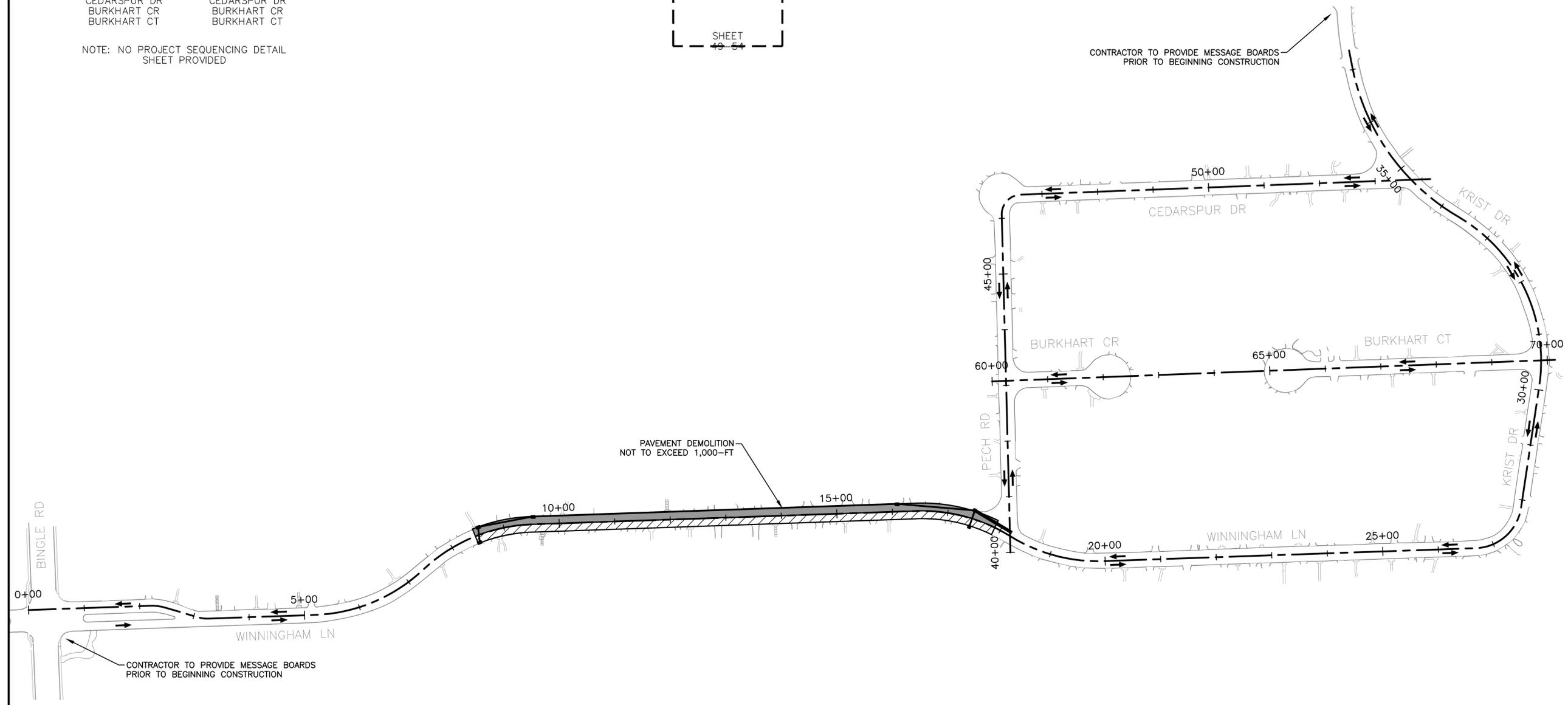


NOTE: NO PROJECT SEQUENCING DETAIL SHEET PROVIDED



SECTION CODE DESCRIPTION:

- SUBPHASE NUMBER
- = TRAFFIC FLOW DIRECTION
- = PHASE A
- = PHASE B



PHASE 6: WINNINGHAM LN PAVING

A TWO-PHASED CONSTRUCTION APPROACH IS TYPICALLY RECOMMENDED FOR EACH STREET. IN PHASE A, CONSTRUCT HALF OF THE STREET WITH ONE-WAY TRAFFIC ON THE OTHER SIDE OF THE STREET. IN PHASE B, CONSTRUCT THE REMAINING HALF OF THE STREET AND MAINTAIN TRAFFIC ON THE NEWLY CONSTRUCTED SIDE OF THE STREET.

- PLACE ADVANCE WARNING SIGNS AND BARRICADES. REFER TO SHEET 90 FOR TRAFFIC CONTROL PLAN AND DETOUR DETAILS.
- SEE TYPICAL SECTIONS 4 ON SHEET 48 AND PROVIDE TEMPORARY PAVEMENT AS NEEDED TO MAINTAIN MINIMUM LANE WIDTH.
- CONTRACTOR TO FIELD VERIFY EXISTING FLs AT CONNECTION TO EXIST STORM SEWER AND CONTRACTOR TO FIELD VERIFY PIPELINE AND EXISTING PRIVATE UTILITY CROSSING ELEVATIONS AND CLEARANCES PRIOR TO CONSTRUCTION OF THE STORM SEWER. NOTIFY ENGINEER OF ANY CONFLICTS IDENTIFIED IN THE FIELD.
- REFER TO SUBPHASE (#) FOR PAVEMENT SEQUENCING. EACH SUBPHASE WILL HAVE AN INDEPENDENT TRAFFIC CONTROL SETUP. ADJUST THE TRAFFIC CONTROL SIGNAGE AS CONSTRUCTION PROGRESSES. CONTRACTOR MAY WORK ON MULTIPLE SUBPHASES CONCURRENTLY PROVIDED THAT ONE-WAY TRAFFIC FLOW IS MAINTAINED.
- CONTRACTOR TO INSTALL SUBGRADE BEFORE CONCRETE PAVEMENT.
- CONSTRUCT NEW PAVEMENT ON HALF OF THE STREET.
- ADJUST ADVANCE WARNING SIGNS AND BARRICADES. REMOVE EXISTING PAVEMENT AND CONSTRUCT NEW PAVEMENT ON THE OTHER HALF OF THE STREET.
- REMOVE ADVANCE WARNING SIGNS AND BARRICADES.
- MAINTAIN DRIVEWAY ACCESS AT ALL TIMES.
- CONTRACTOR TO PROVIDE DOOR HANGERS PRIOR TO BEGINNING CONSTRUCTION.

CONTRACTOR MUST COMPLETELY FINISH THIS PHASE BEFORE STARTING NEW PHASE, INCLUDING ALL FINAL GRADES AND SODDING.

NO.	DATE	REVISIONS



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CITY OF SPRING VALLEY VILLAGE

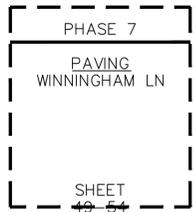
BRIGHTON PLACE RECONSTRUCTION

PROJECT SEQUENCING
(4 OF 6)

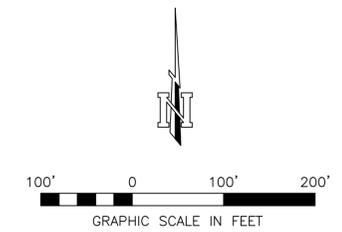
SUBMITTED: 12/04/23	DESIGNED BY:
SCALE: 1"=100'	DRAWN BY: AA
DATE: 12/04/23	SHEET No.: 52 OF 101
SURVEY BY: CFA	DWG. No.:
F B No.: -	

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PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5	PHASE 6	PHASE 7	PHASE 8
WATER WINNINGHAM LN KRIST DR PECH RD CEDARSPUR DR BURKHART CR BURKHART CT	SANITARY WINNINGHAM LN KRIST DR PECH RD CEDARSPUR DR BURKHART CR BURKHART CT	STORM AND PAVING WINNINGHAM LN	STORM AND PAVING KRIST DR BURKHART CT	STORM AND PAVING PECH RD CEDARSPUR DR BURKHART CR	STORM AND PAVING WINNINGHAM LN	PAVING WINNINGHAM LN	STORM AND PAVING WINNINGHAM LN

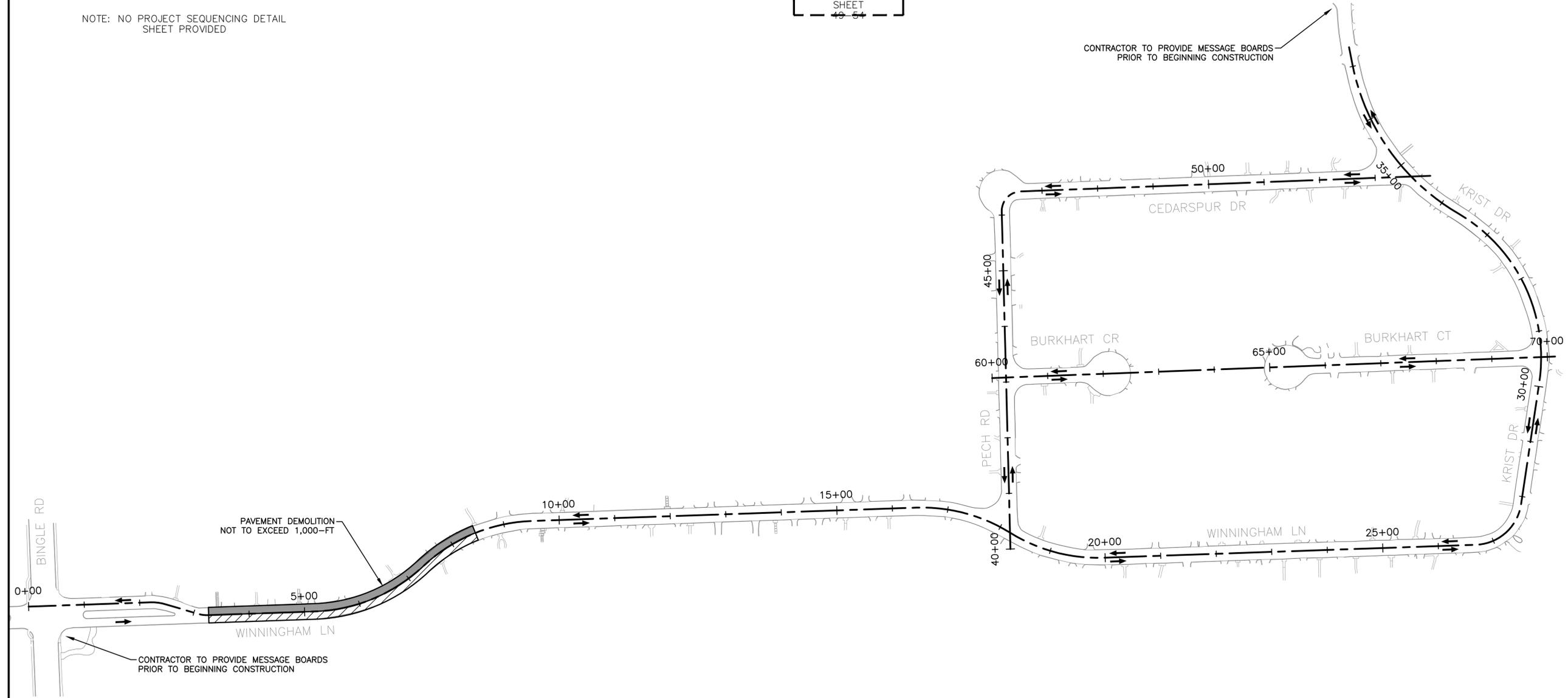


NOTE: NO PROJECT SEQUENCING DETAIL SHEET PROVIDED



SECTION CODE DESCRIPTION:

- # = SUBPHASE NUMBER
- ↔ = TRAFFIC FLOW DIRECTION
- [Solid Grey Box] = PHASE A
- [Hatched Box] = PHASE B



PHASE 7: WINNINGHAM LN PAVING

A TWO-PHASED CONSTRUCTION APPROACH IS TYPICALLY RECOMMENDED FOR EACH STREET. IN PHASE A, CONSTRUCT HALF OF THE STREET WITH ONE-WAY TRAFFIC ON THE OTHER SIDE OF THE STREET. IN PHASE B, CONSTRUCT THE REMAINING HALF OF THE STREET AND MAINTAIN TRAFFIC ON THE NEWLY CONSTRUCTED SIDE OF THE STREET.

- PLACE ADVANCE WARNING SIGNS AND BARRICADES. REFER TO SHEET 90 FOR TRAFFIC CONTROL PLAN AND DETOUR DETAILS.
- SEE TYPICAL SECTIONS 4 ON SHEET 48 AND PROVIDE TEMPORARY PAVEMENT AS NEEDED TO MAINTAIN MINIMUM LANE WIDTH.
- CONTRACTOR TO FIELD VERIFY EXISTING FLs AT CONNECTION TO EXIST STORM SEWER AND CONTRACTOR TO FIELD VERIFY PIPELINE AND EXISTING PRIVATE UTILITY CROSSING ELEVATIONS AND CLEARANCES PRIOR TO CONSTRUCTION OF THE STORM SEWER. NOTIFY ENGINEER OF ANY CONFLICTS IDENTIFIED IN THE FIELD.
- REFER TO SUBPHASE (#) FOR PAVEMENT SEQUENCING. EACH SUBPHASE WILL HAVE AN INDEPENDENT TRAFFIC CONTROL SETUP. ADJUST THE TRAFFIC CONTROL SIGNAGE AS CONSTRUCTION PROGRESSES. CONTRACTOR MAY WORK ON MULTIPLE SUBPHASES CONCURRENTLY PROVIDED THAT ONE-WAY TRAFFIC FLOW IS MAINTAINED.
- CONSTRUCT NEW PAVEMENT ON HALF OF THE STREET.
- ADJUST ADVANCE WARNING SIGNS AND BARRICADES. REMOVE EXISTING PAVEMENT AND CONSTRUCT NEW PAVEMENT ON THE OTHER HALF OF THE STREET.
- REMOVE ADVANCE WARNING SIGNS AND BARRICADES.
- MAINTAIN DRIVEWAY ACCESS AT ALL TIMES.
- CONTRACTOR TO PROVIDE DOOR HANGERS PRIOR TO BEGINNING CONSTRUCTION.

CONTRACTOR MUST COMPLETELY FINISH THIS PHASE BEFORE STARTING NEW PHASE, INCLUDING ALL FINAL GRADES AND SODDING.

NO.	DATE	REVISIONS



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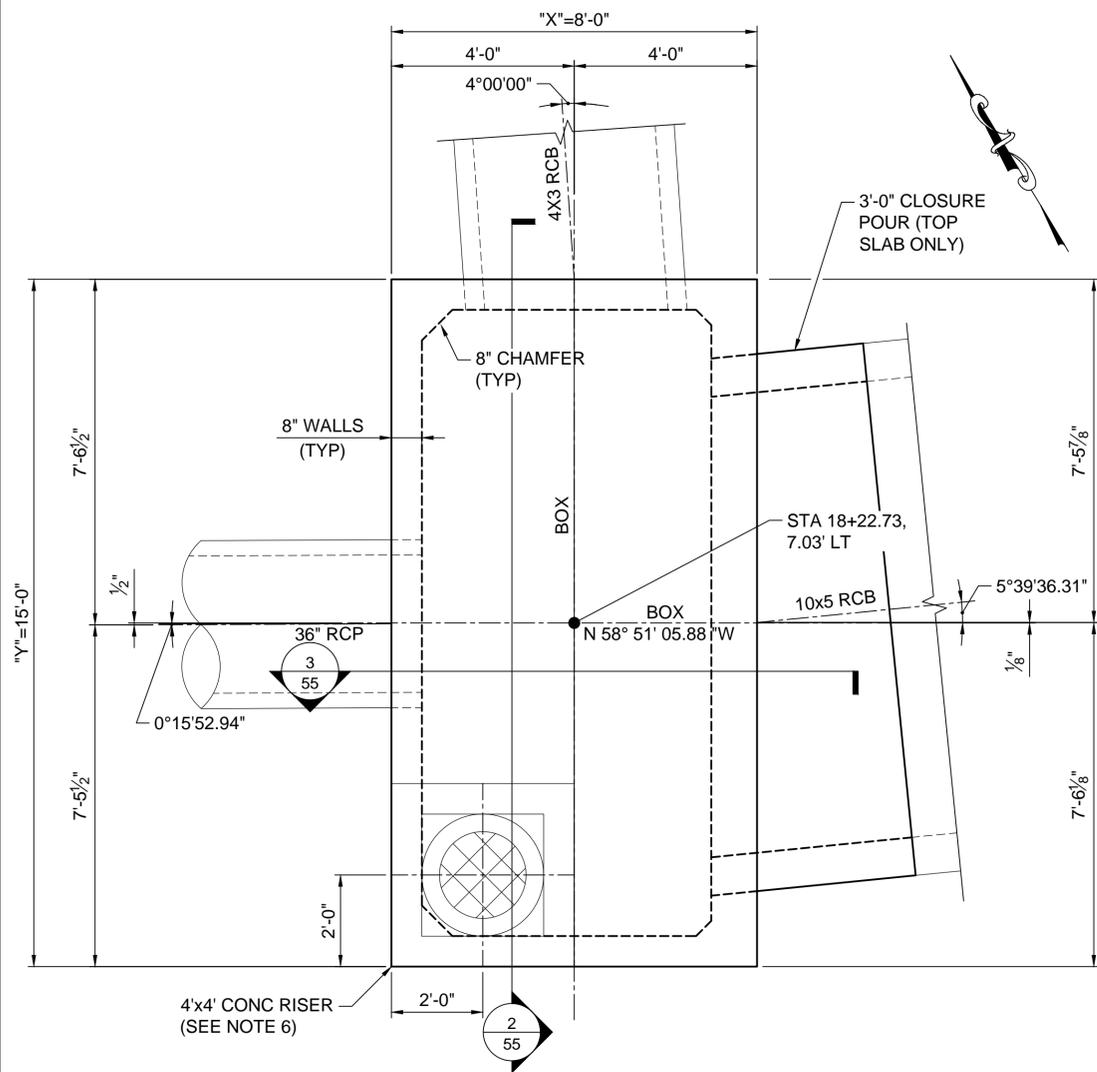
CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

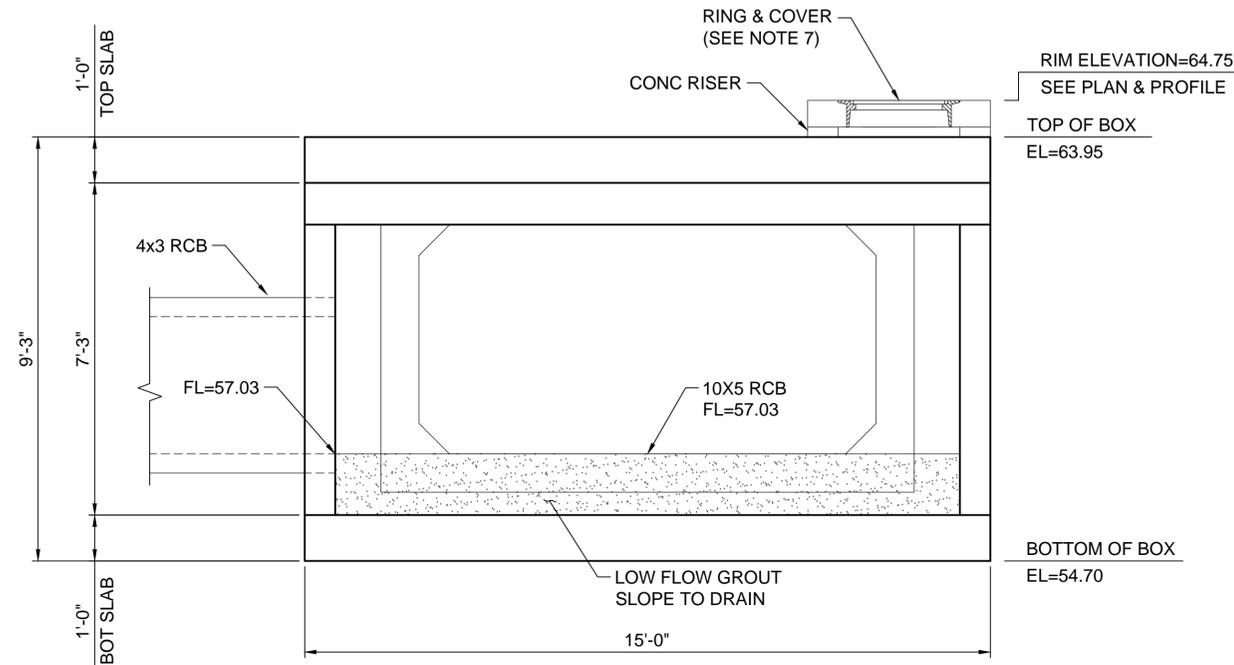
PROJECT SEQUENCING
(5 OF 6)

SUBMITTED: 12/04/23	DESIGNED BY: JMS
SCALE: 1"=100'	DRAWN BY: AA
DATE: 12/04/23	SHEET No.: 53 OF 101
SURVEY BY: CFA	DWG. No.:
F B No.: -	

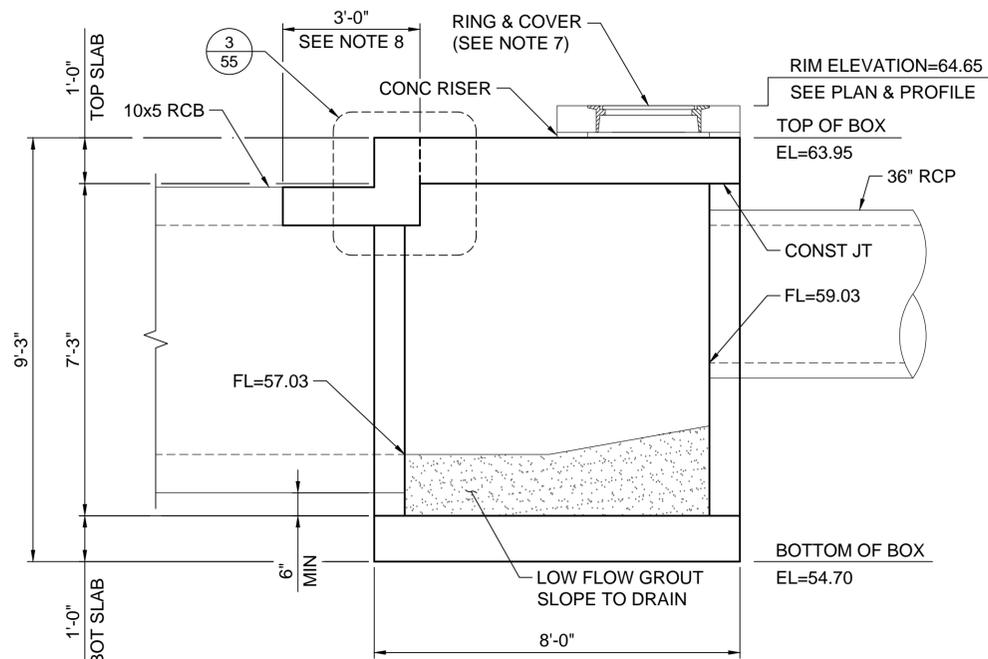
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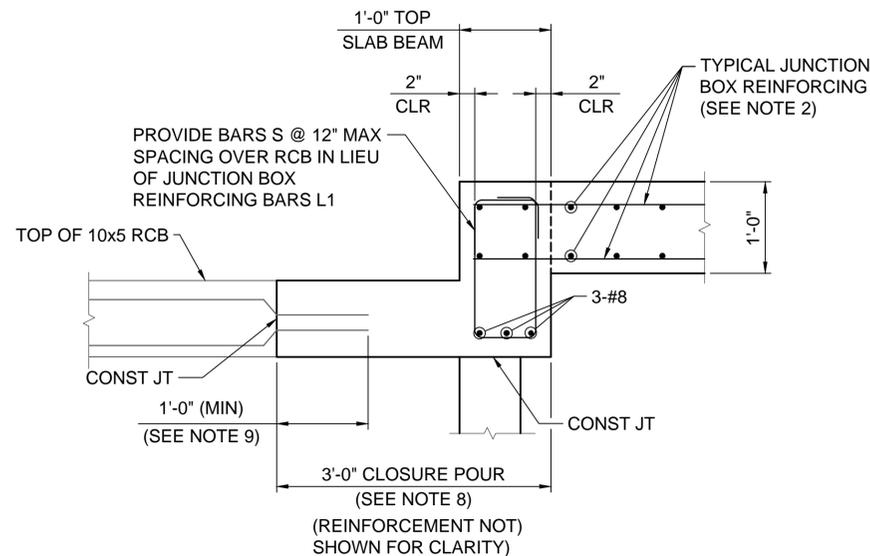
1 JUNCTION BOX LAYOUT
SCALE: 1/2" = 1'-0"



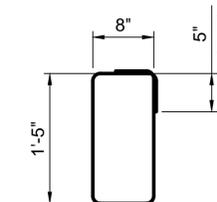
2 JUNCTION BOX SECTION
SCALE: 1/2" = 1'-0"



3 JUNCTION BOX SECTION
SCALE: 1/2" = 1'-0"



4 ADDITIONAL REINF REQ'D
SCALE: 1" = 1'-0"



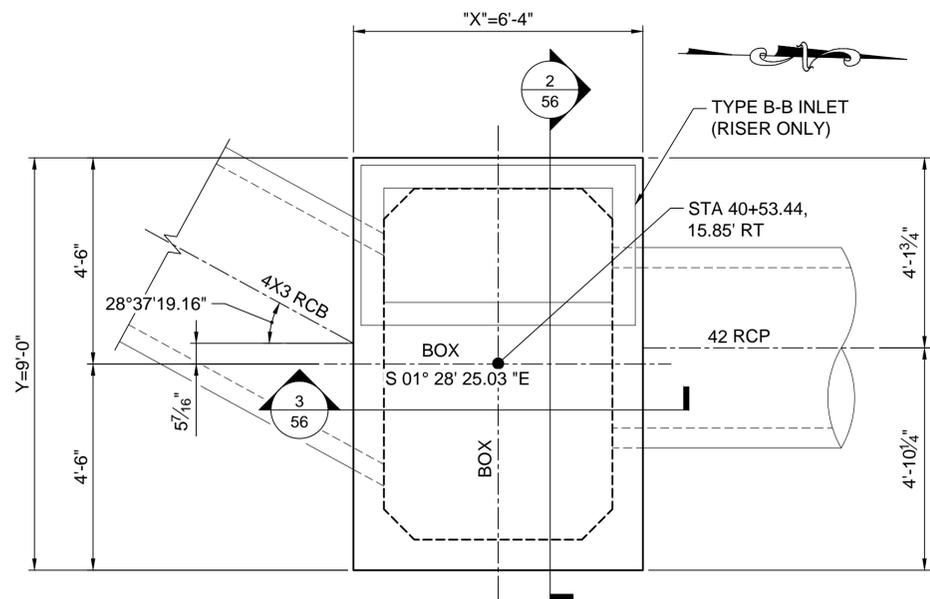
5 BARS S (#4)
SCALE: N.T.S.

GENERAL NOTES:

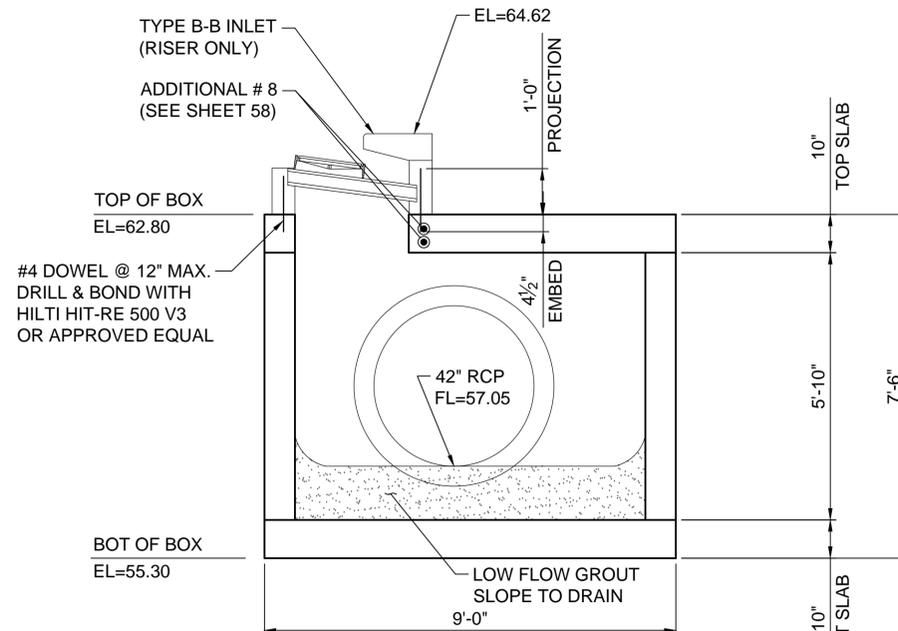
1. CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3,600 psi.
2. FOR REINFORCING REQUIREMENTS, SEE SHEET 57.
3. AS APPROVED BY THE ENGINEER ALTERNATE DESIGN DRAWINGS BEARING THE SEAL OF A REGISTERED PROFESSIONAL ENGINEER MAY BE ACCEPTABLE FOR PRECAST CONSTRUCTION OF THE JUNCTION BOX AND/OR RISER.
4. IN AREAS OF CONFLICT BETWEEN REINFORCING STEEL, BLOCKOUTS, PIPE, ANCHOR BOLTS OR OTHER REINFORCING STEEL, THE REINFORCEMENT SHALL BE BENT OR ADJUSTED TO CLEAR AS DIRECTED BY THE ENGINEER.
5. LOW FLOW GROUT SHALL BE PLACED TO MINIMIZE THE ACCUMULATION OF SILT AND DEBRIS.
6. THE RISER SHALL BE CONSTRUCTED OF REINFORCED CONCRETE AS SHOWN ON SHEET 58. USE OF REINFORCED CONCRETE PIPE IS NOT PERMITTED.
7. RING AND COVER SHALL BE AS SHOWN ELSEWHERE IN THE PLANS.
8. CAST-IN PLACE CONCRETE CLOSURE SHALL BE 3'-0" MIN. BOXES SHALL BE CAST SHORT OR BROKEN BACK IN THE FIELD. ALL REINFORCING IN THE CLOSURE SHALL BE THE SAME SIZE AND SPACING AS IN THE PRECAST BOX SECTION. EXCEPT WHERE SHOWN OTHERWISE, THE CAST-IN-PLACE CLOSURE SHALL BE FLUSH WITH THE INSIDE AND OUTSIDE FACES OF THE PRECAST BOX SECTION.
9. PRECAST BOX REINFORCING SHALL EXTEND A MINIMUM OF 1'-0" INTO THE CONCRETE CLOSURE (TYP).

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 TBPELS Engineering Firm No. 274 Land Surveying Firm No. 10046700 13430 Northwest Freeway, Suite 1100 Houston, Texas 77040 713.462.3242 fax 713.462.3262 www.cobbfendley.com		
CITY OF SPRING VALLEY VILLAGE		
BRIGHTON PLACE RECONSTRUCTION		
JUNCTION BOX - JB01		
SUBMITTED: 8/18/23	DESIGNED BY:	
SCALE:	DRAWN BY: CLR	
DATE: 8/18/23	SHEET No.: 55 OF 101	
SURVEY BY: CFA	DWG. No.:	
F B No.: -		

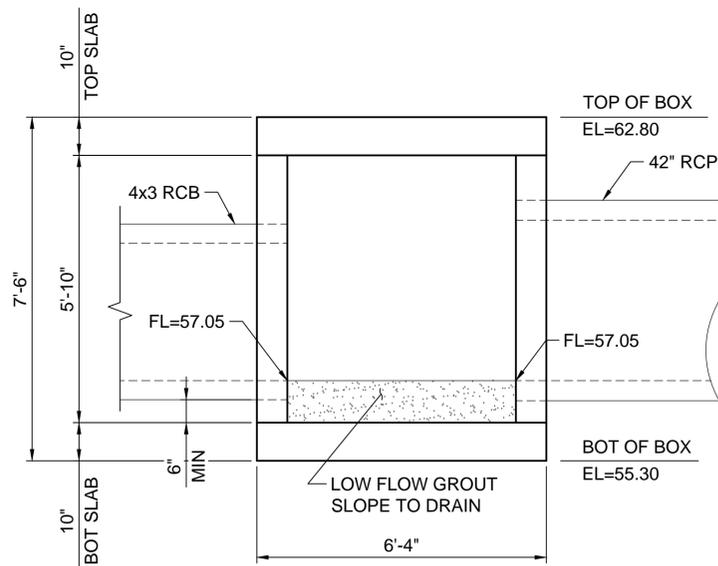
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1 JUNCTION BOX LAYOUT
SCALE: 1/2" = 1'-0"



2 JUNCTION BOX SECTION
SCALE: 1/2" = 1'-0"



3 JUNCTION BOX SECTION
SCALE: 1/2" = 1'-0"

GENERAL NOTES:

1. CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3,600 psi.
2. FOR REINFORCING REQUIREMENTS, SEE SHEET 57.
3. AS APPROVED BY THE ENGINEER ALTERNATE DESIGN DRAWINGS BEARING THE SEAL OF A REGISTERED PROFESSIONAL ENGINEER MAY BE ACCEPTABLE FOR PRECAST CONSTRUCTION OF THE JUNCTION BOX AND/OR RISER.
4. IN AREAS OF CONFLICT BETWEEN REINFORCING STEEL, BLOCKOUTS, PIPE, ANCHOR BOLTS OR OTHER REINFORCING STEEL, THE REINFORCEMENT SHALL BE BENT OR ADJUSTED TO CLEAR AS DIRECTED BY THE ENGINEER.
5. LOW FLOW GROUT SHALL BE PLACED TO MINIMIZE THE ACCUMULATION OF SILT AND DEBRIS.
6. THE RISER SHALL BE CONSTRUCTED OF REINFORCED CONCRETE AS SHOWN ON SHEET 58. USE OF REINFORCED CONCRETE PIPE IS NOT PERMITTED.

NO.	DATE	REVISIONS

Yunuen Garcia



11/6/2023

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CITY OF SPRING VALLEY VILLAGE

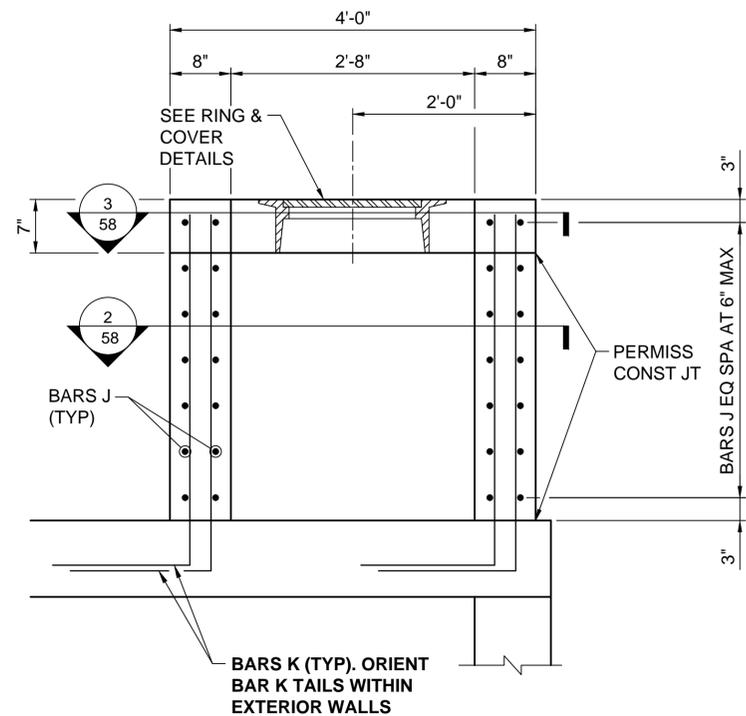
BRIGHTON PLACE RECONSTRUCTION

JUNCTION BOX JB03

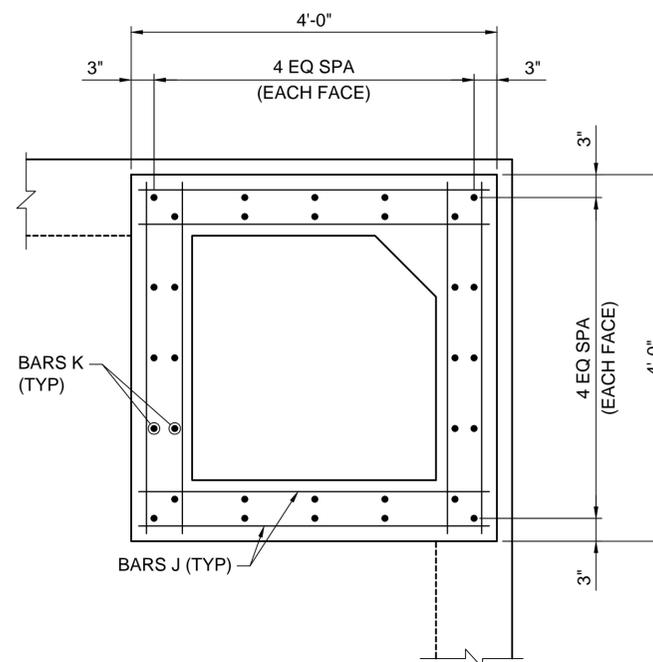
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SCALE:	DRAWN BY: CLR
DATE: 8/18/23	SHEET No.: 56A OF 101
SURVEY BY: CFA	DWG. No.:
F B No.: -	

NOTE:

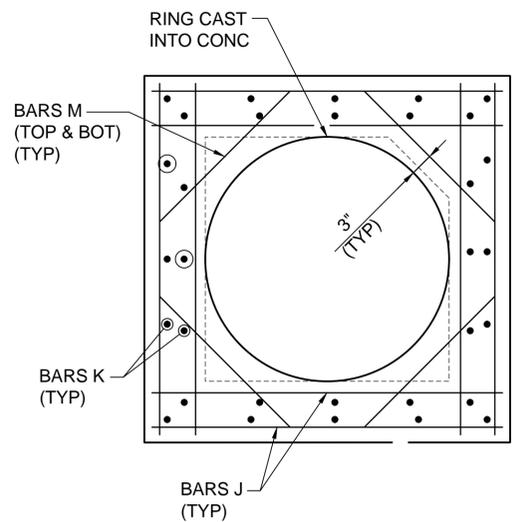
1. FOR GENERAL NOTES SEE SHEET 57.



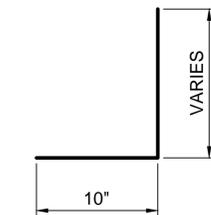
1 CONCRETE RISER ELEVATION
SCALE: 1" = 1'-0"



2 CONCRETE RISER SECTION
SCALE: 1" = 1'-0"

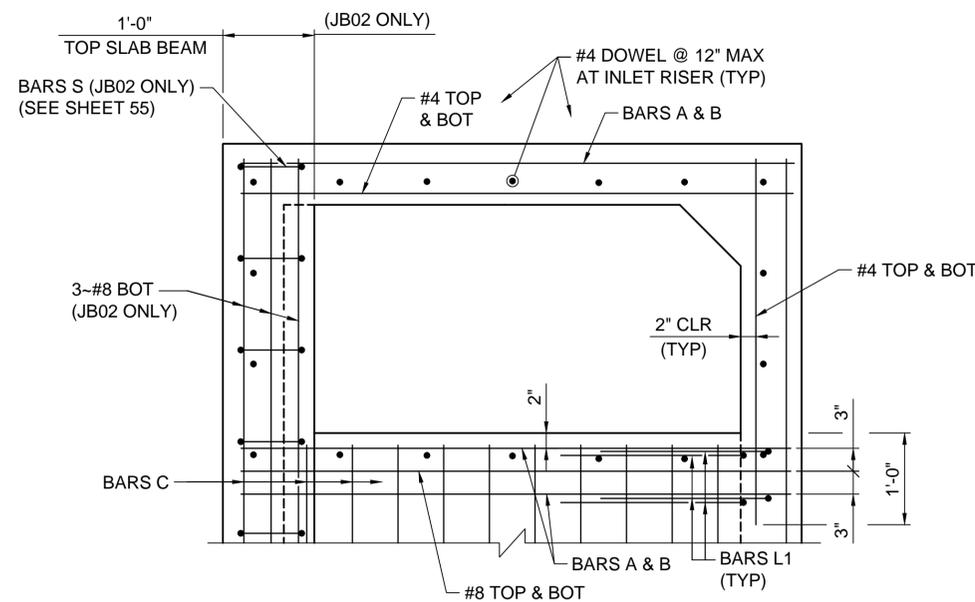


3 CONCRETE RISER TOP PLAN
SCALE: 1" = 1'-0"



4 BARS K
SCALE: N.T.S.

BAR TABLE	
BARS	SIZE
J	#5
K	#5
M	#5



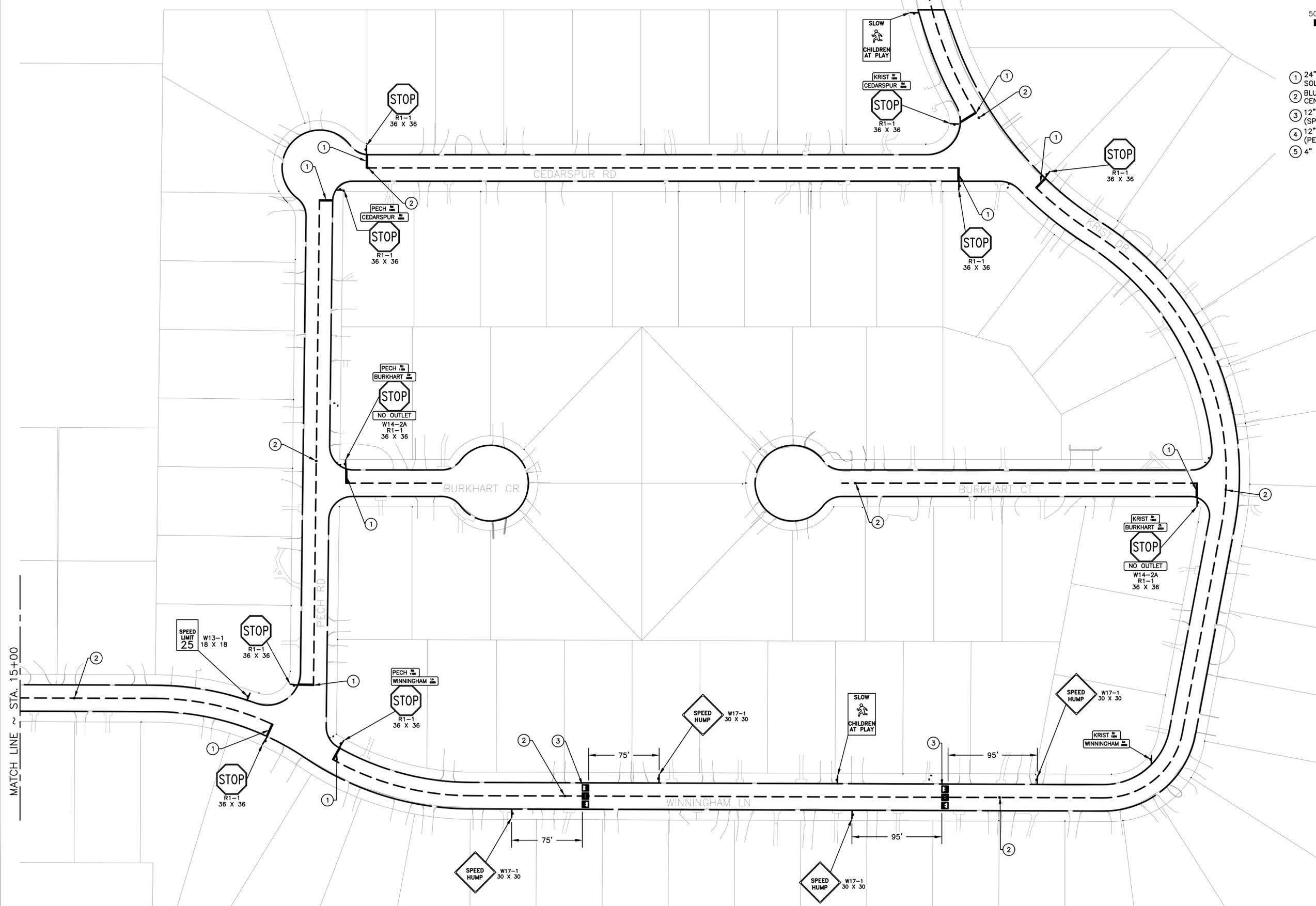
5 PLAN: JB02 & JB03 SLAB OPENING AT INLET
SCALE: 1" = 1'-0"

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CITY OF SPRING VALLEY VILLAGE		
BRIGHTON PLACE RECONSTRUCTION		
JUNCTION BOX DETAILS (2 OF 2)		
SUBMITTED: 8/18/23	DESIGNED BY:	
SCALE:	DRAWN BY: CLR	
DATE: 8/18/23	SHEET No.: 58 OF 101	
SURVEY BY: CFA	DWG. No.:	
F B No.: -		

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- LEGEND**
- ① 24" REFLECTORIZED WHITE PAVEMENT MARKING, SOLID, STOP BAR (SEE SHEET * FOR DETAIL)
 - ② BLUE REFLECTIVE MARKER TO BE PLACED AT CENTER OF ROADWAY AT FIRE HYDRANT LOCATIONS
 - ③ 12" REFLECTORIZED WHITE PAVEMENT MARKINGS, SOLID (SPEED CUSHION) (SEE SHEET * FOR DETAIL)
 - ④ 12" REFLECTORIZED WHITE PAVEMENT MARKINGS, SOLID (PEDESTRIAN CROSSING) (SEE SHEET * FOR DETAIL)
 - ⑤ 4" REFLECTORIZED WHITE PAVEMENT MARKINGS, BROKEN



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CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

STRIPING & SIGNAGE
 (2 OF 2)

SUBMITTED: 12/04/23	DESIGNED BY: JMS
SCALE: 1"=50'	DRAWN BY: AA
DATE: 12/04/23	SHEET No.: 60 OF 101
SURVEY BY: CFA	DWG. No.:
F B No.: -	



- NOTE:
1. CONTRACTOR TO SOD ALL DISTURBED AREAS BETWEEN BACK OF CURB AND ROW WITH ST AUGUSTINE SOD.
 2. SEE DETAIL SHEET 62 FOR INLET PROTECTION BARRER

NO.	DATE	REVISIONS



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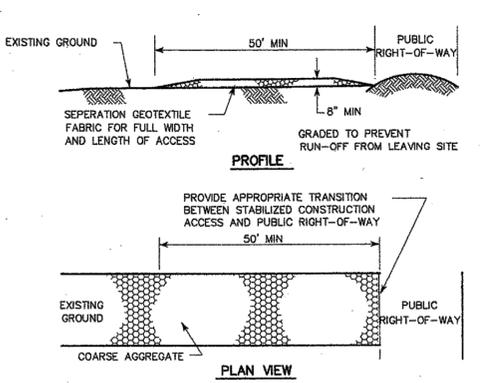
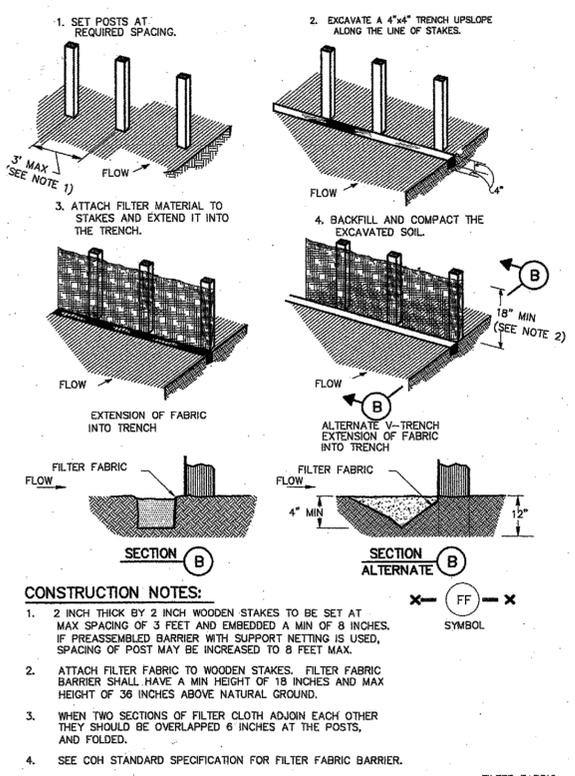
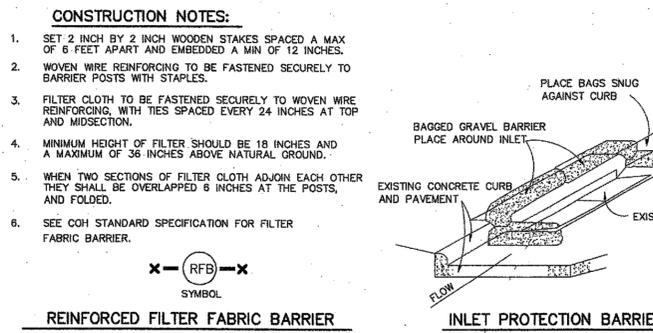
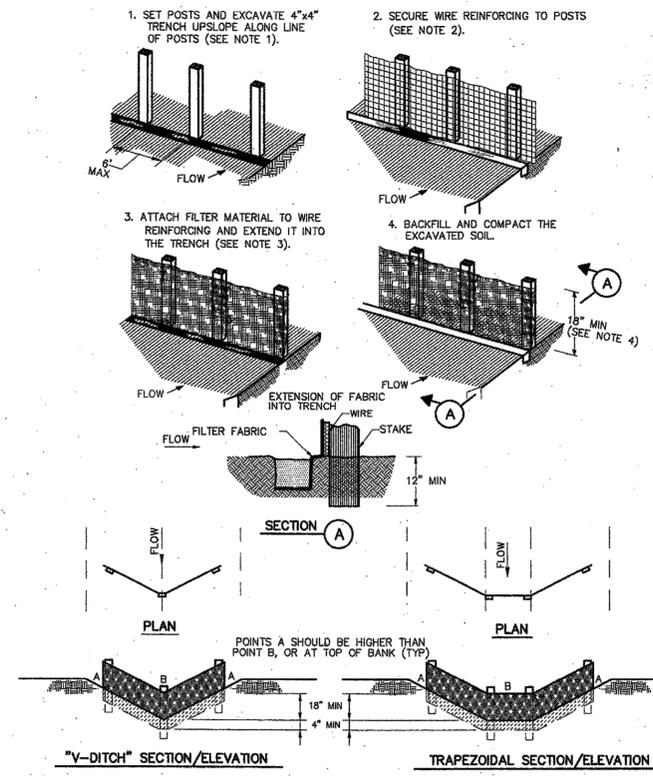
CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

STORM WATER POLLUTION PREVENTION PLAN DETAILS

SUBMITTED: 12/04/23	DESIGNED BY: JMS
SCALE: 1"=100'	DRAWN BY: AA
DATE: 12/04/23	SHEET No.: 61 OF 101
SURVEY BY: CFA	DWG. No:
F B No.: -	

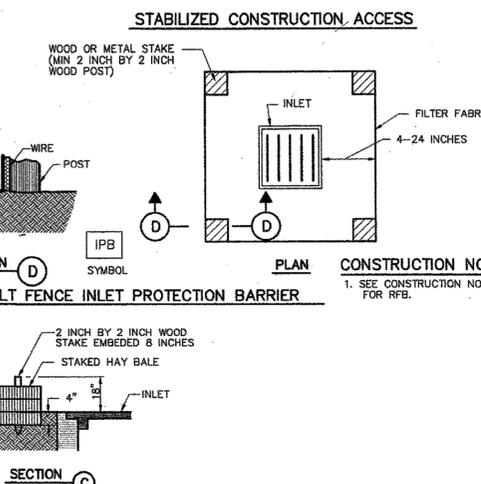
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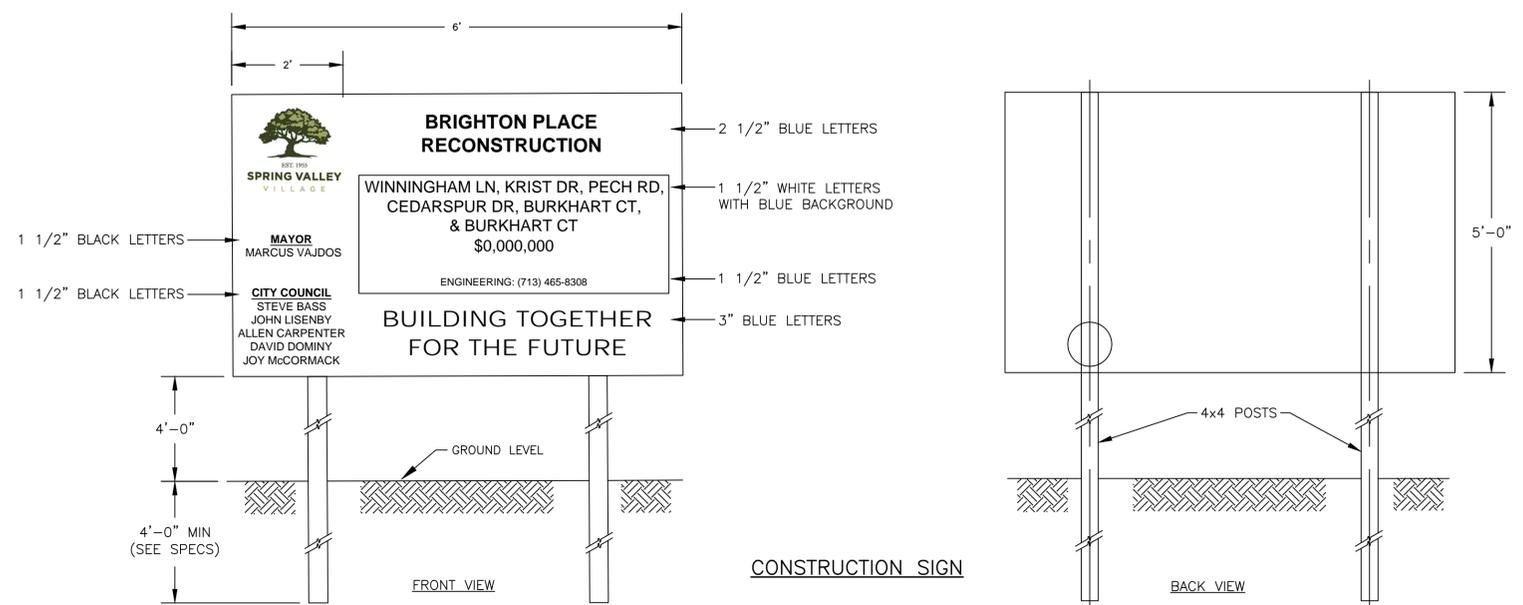
CONSTRUCTION NOTES:

- LENGTH SHALL BE AS SHOWN ON THE CONSTRUCTION DRAWINGS, BUT NOT LESS THAN 50 FEET.
- THICKNESS SHALL BE NOT LESS THAN 8 INCHES.
- WIDTH SHALL BE NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS.
- STABILIZATION FOR OTHER AREAS SHALL HAVE THE SAME AGGREGATE THICKNESS AND WIDTH REQUIREMENTS AS THE STABILIZED CONSTRUCTION ACCESS, UNLESS OTHERWISE SHOWN ON THE CONSTRUCTION DRAWINGS.
- STABILIZED AREA MAY BE WIDENED OR LENGTHENED TO ACCOMMODATE A WASHING AREA. AN OUTLET SEDIMENT TRAP MUST BE PROVIDED FOR THE WASHING AREA.
- COH STANDARD SPECIFICATION FOR STABILIZED CONSTRUCTION ACCESS.
- STABILIZED CONSTRUCTION ACCESS SHALL BE MAINTAINED FREE OF SEDIMENT FOR THE DURATION OF THE PROJECT.

SC SYMBOL



STORM WATER POLLUTION PREVENTION PLAN DETAILS



NO.	DATE	REVISIONS

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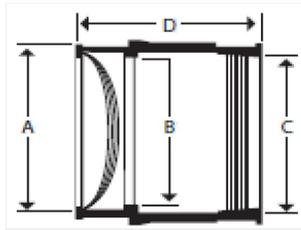
BRIGHTON PLACE RECONSTRUCTION

GENERAL DETAILS

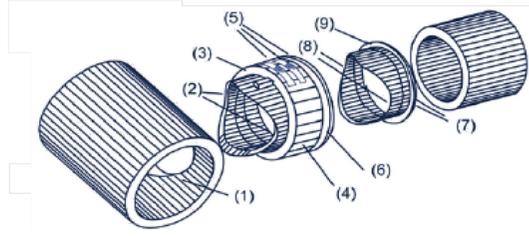
SUBMITTED: 12/04/23	DESIGNED BY: JMS
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DATE: 12/04/23	SHEET No.: 62 OF 101
SURVEY BY: CFA	DWG. No.:
F B No.: -	

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Connection of sewer service lines to existing clay City sewer mains shall use fittings specifically manufactured for the pipe materials of clay. The lateral connection shall be strapless and accommodate for ground movement with heavy duty stainless steel shear bands to prevent off set joints. The lateral connection fitting must provide a "positive stop" located inside the fitting that prohibits protrusion of the lateral pipe into the main line pipe. The fitting must provide a smooth transition all the way through to the main line pipe manufactured from synthetic rubber. The fitting will ensure a positive, water-tight and rot-free seal. The hole for the sewer service must be cored and not chipped. The fitting must meet or exceed ASTM 923, ASTM 425, ASTM 1173.



Connector Size	Connector P/N	Suggested Lateral Pipe O.D. Range	Hole/Connector Dimensions				Pipe Clamp P/N	Minimum Pipe I.D.	Minimum Wall Thickness
			A	B	C	D			
4"	4" TAP-N-TEE	5.38"	5.0625"	4.25"	5.38"	6.00"	#90	8"	.50"
6"	6" TAP-N-TEE	8.00"	7.125"	6.38"	8.00"	8.75"	#136	8"	.50"
8"	8" TAP-N-TEE	10.05"	9.125"	8.25"	10.00"	8.00"	#168	10"	.50"



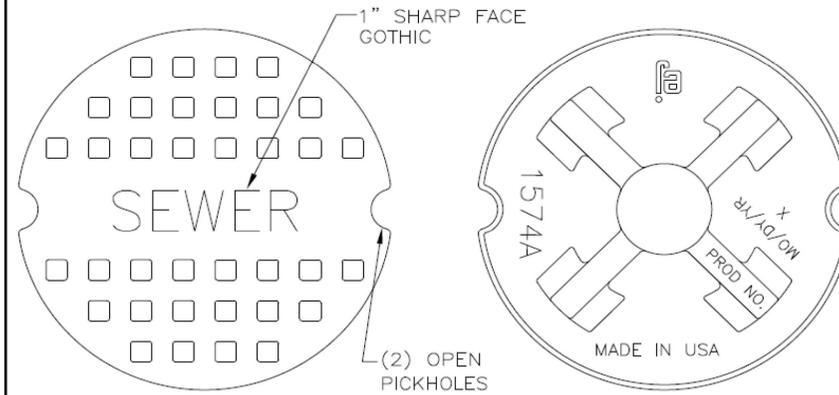
EXAMPLE OF SEWER SADDLE USED FOR CLAY PIPE

Connection of service lines to existing City PVC or Cast Iron sewer mains shall use fittings specifically manufactured for the pipe materials. The lateral connection shall be a sewer saddle with an adjustable 3 1/2 inch stainless steel strap per ASTM A 240, type 304. Bolts shall be 1/2 inch UNC rolled thread, lubricant coated, stainless steel per ASTM A 193, type 304. The nuts shall be stainless steel per ASTM A 194, type 304. Washers shall be stainless steel per ASTM A 240, type 304 and plastic lubricating washers. The gasket shall be SBR per ASTM D 2000 MBA 710, compounded for water and sewer service. The lateral connection fitting must provide a "positive stop" located inside the fitting that prohibits protrusion of the lateral pipe into the main line pipe. The fitting must ensure a positive, water-tight and rot-free seal.

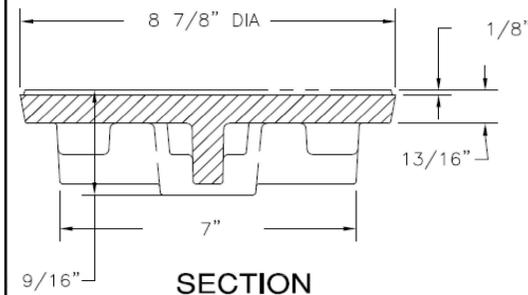


EXAMPLE OF SEWER SADDLE USED FOR PVC AND CAST PIPE

Cleanout/Monument Box Cover

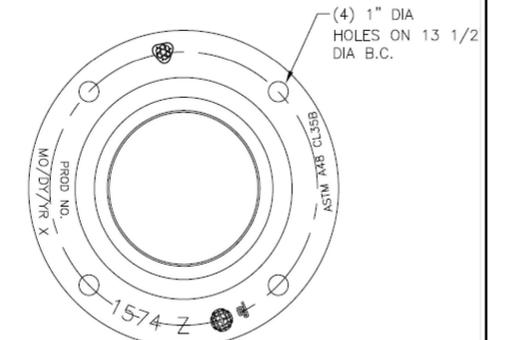


BOTTOM VIEW

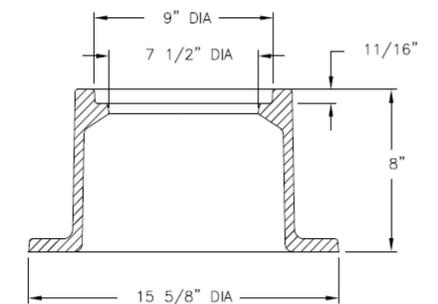


SECTION

Cleanout/Monument Box Frame



PLAN VIEW



FRAME SECTION



SEWER SERVICE TAP CONNECTION FITTINGS

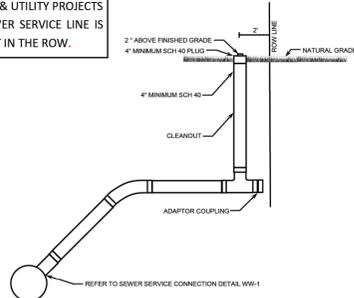
DETAIL: WW-1



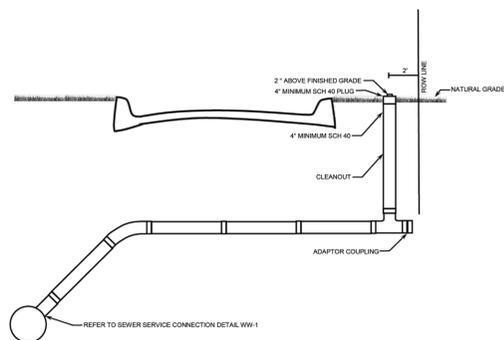
CLEAN OUT FRAME/MONUMENT BOX FRAME/COVER FOR CONCRETE

DETAIL: WW-2

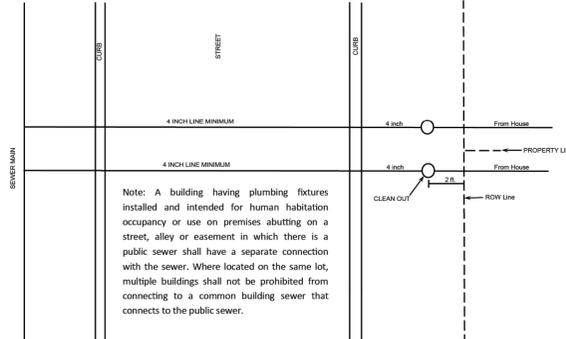
NOTE: DETAIL FOR CITY PAVEMENT & UTILITY PROJECTS WHERE THE SEWER MAIN OR SEWER SERVICE LINE IS REPLACED AS PART OF THE PROJECT IN THE ROW.



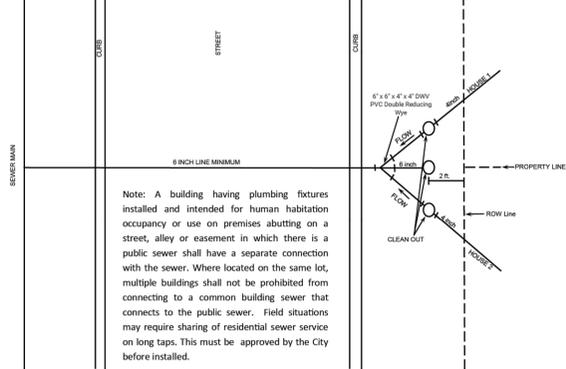
SHORT SERVICE LINE CLEAN-OUT DETAIL



LONG SERVICE LINE CLEAN-OUT DETAIL



TOP VIEW—SINGLE LONG/SHORT SERVICE LINE CLEAN-OUT DETAIL



TOP VIEW—DOUBLE LONG/SHORT SERVICE LINE CLEAN-OUT DETAIL



CLEAN OUT AND SERVICE LINE LOCATION DETAIL

DETAIL: WW-3

NO.	DATE	REVISIONS



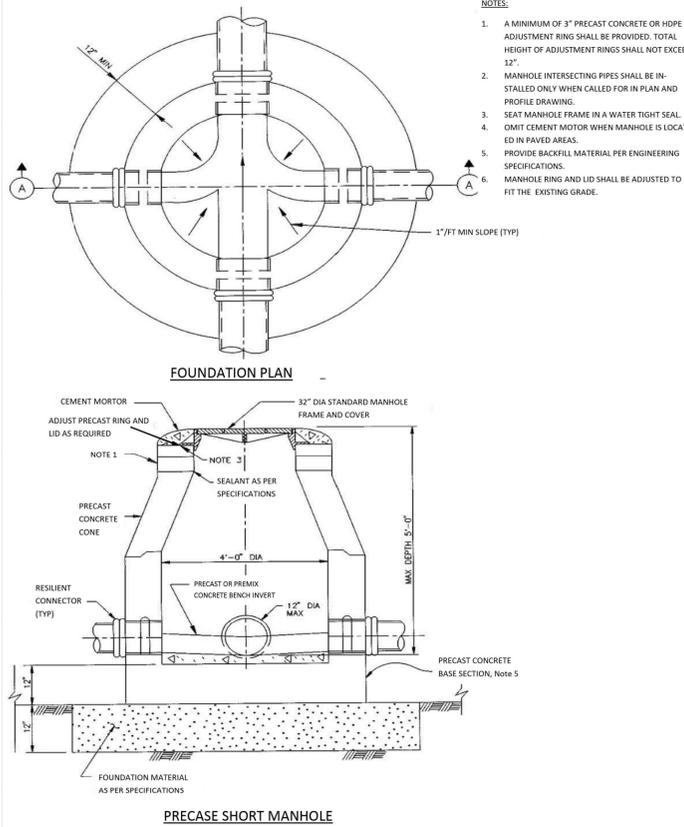
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CITY OF SPRING VALLEY VILLAGE

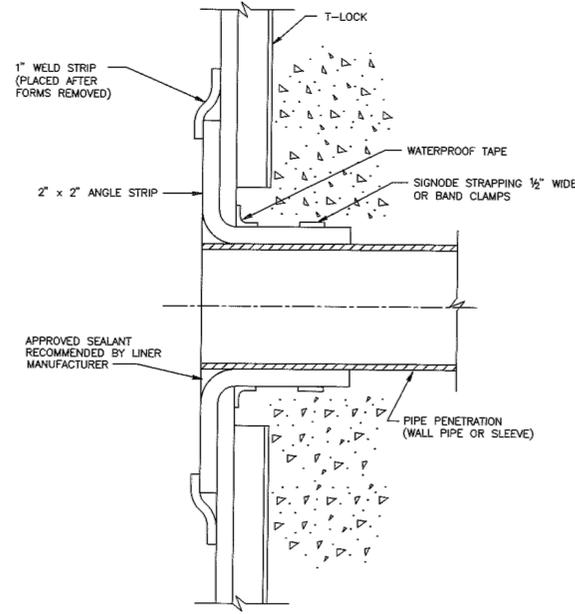
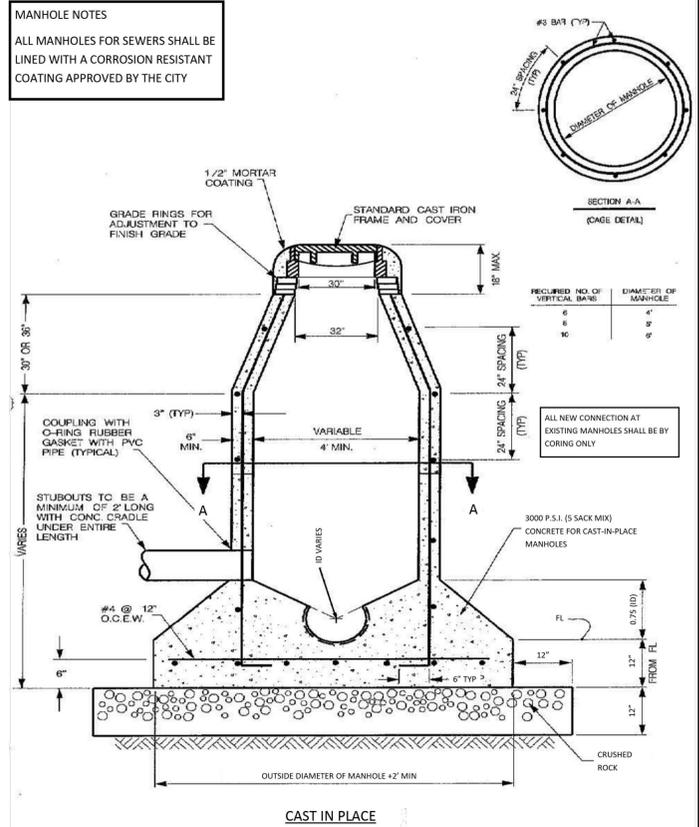
BRIGHTON PLACE RECONSTRUCTION

SANITARY SEWER DETAILS
 (1 OF 4)

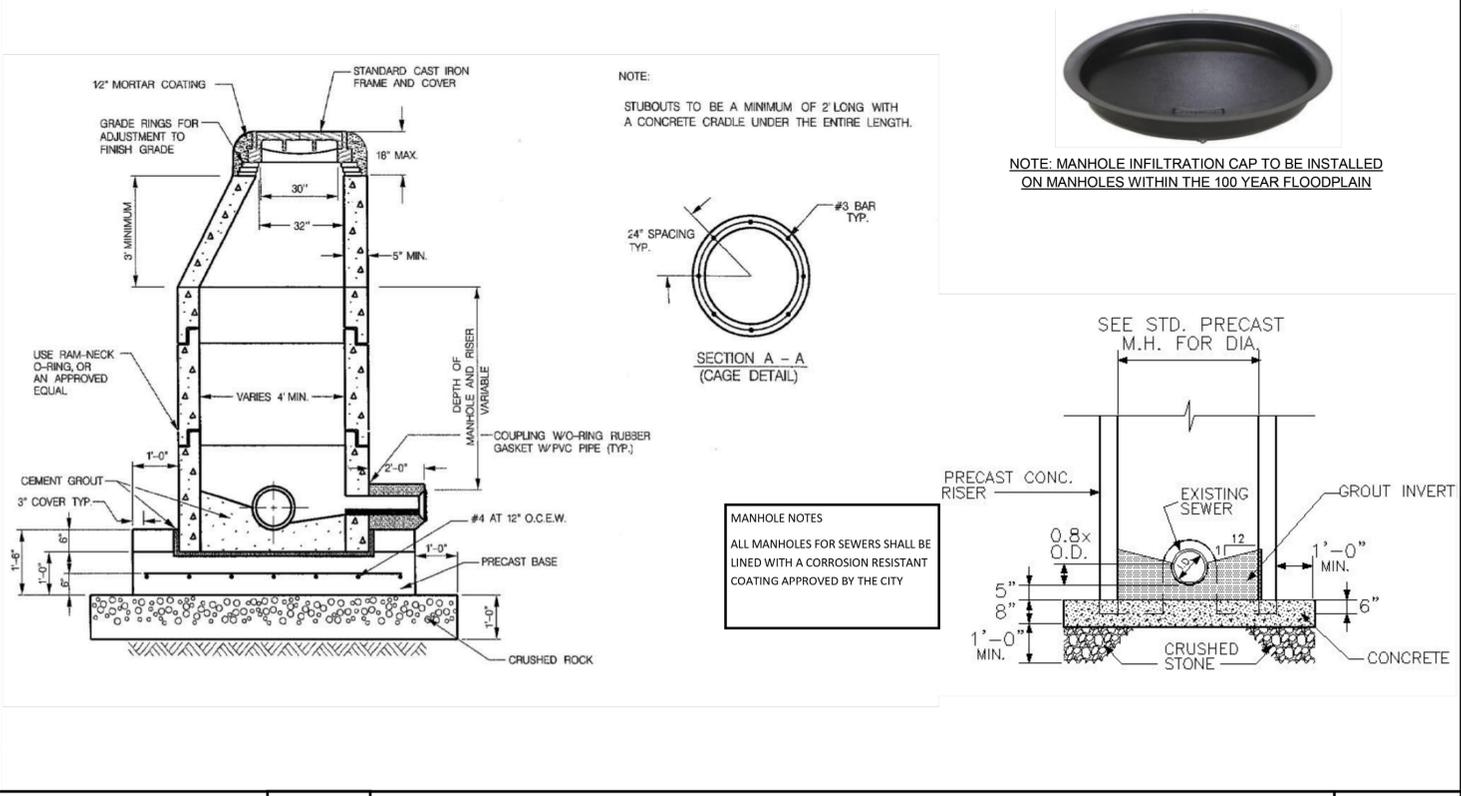
SUBMITTED: 12/04/23	DESIGNED BY: JMS
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DATE: 12/04/23	SHEET No.: 63 OF 101
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F B No.: -	



- NOTES:**
1. A MINIMUM OF 3" PRECAST CONCRETE OR HDPE ADJUSTMENT RING SHALL BE PROVIDED. TOTAL HEIGHT OF ADJUSTMENT RINGS SHALL NOT EXCEED 12".
 2. MANHOLE INTERSECTING PIPES SHALL BE INSTALLED ONLY WHEN CALLED FOR IN PLAN AND PROFILE DRAWING.
 3. SEAT MANHOLE FRAME IN A WATER TIGHT SEAL. OMIT CEMENT MOTOR WHEN MANHOLE IS LOCATED IN PAVED AREAS.
 4. PROVIDE BACKFILL MATERIAL PER ENGINEERING SPECIFICATIONS.
 5. MANHOLE RING AND LID SHALL BE ADJUSTED TO FIT THE EXISTING GRADE.

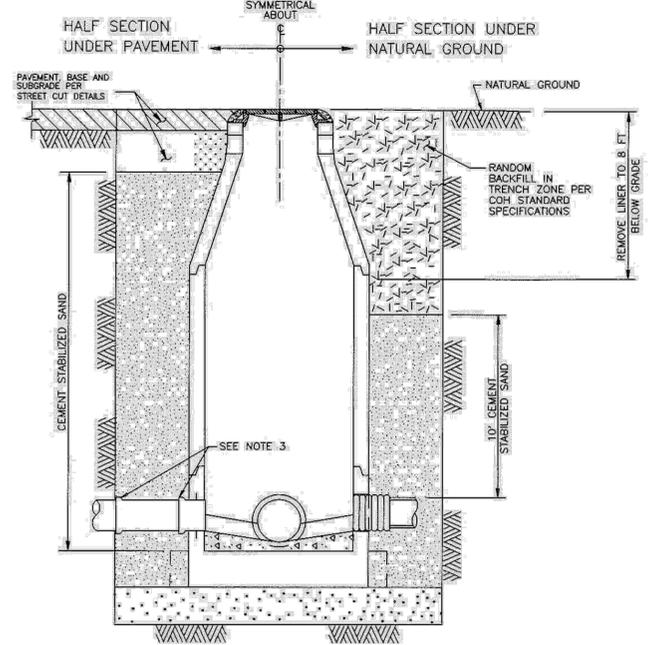


EST. 1935. **SPRING VALLEY VILLAGE** **PRECAST & CAST IN PLACE CONCRETE MANHOLES NO OUTSIDE DROP MANHOLES** DETAIL: WW-4



EST. 1935. **SPRING VALLEY VILLAGE** **PRECAST CONCENTRIC & BASE MANHOLE** DETAIL: WW-5

- NOTES:**
1. GROUTING OF MANHOLE STRUCTURE ANNULAR SPACE WILL BE PERMITTED IN CASES WHERE INSUFFICIENT WORK SPACE EXISTS FOR PLACEMENT AND COMPACTION OF CEMENT STABILIZED SAND, PER COM STANDARD SPECIFICATION FOR TUNNEL GROUT.
 2. THIS DETAIL ALSO APPLIES TO BACKFILL OF SHAFTS WITHOUT STRUCTURES.
 3. ARRANGE PIPE JOINTS AS SHOWN WHEN USING RIGID CONNECTION TO CAST IN PLACE MANHOLE BASE.



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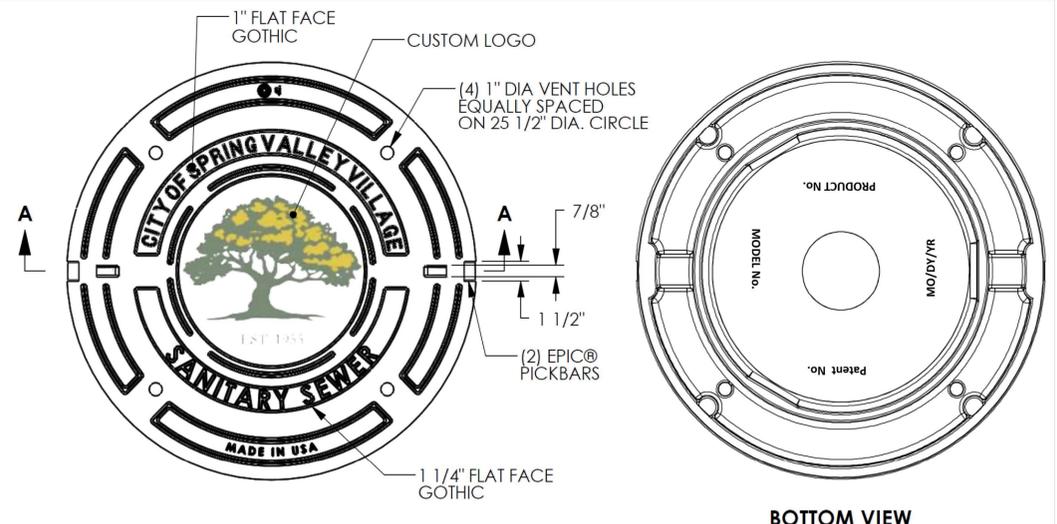
CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

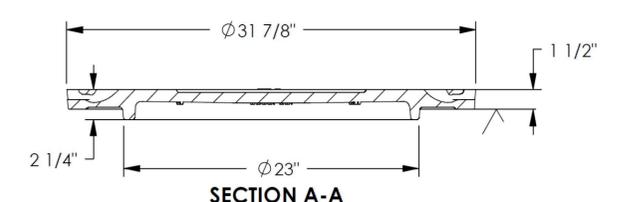
SANITARY SEWER DETAILS
(2 OF 4)

SUBMITTED: 12/04/23	DESIGNED BY: JMS
SCALE: N/A	DRAWN BY: BMG
DATE: 12/04/23	SHEET No.: 64 OF 101
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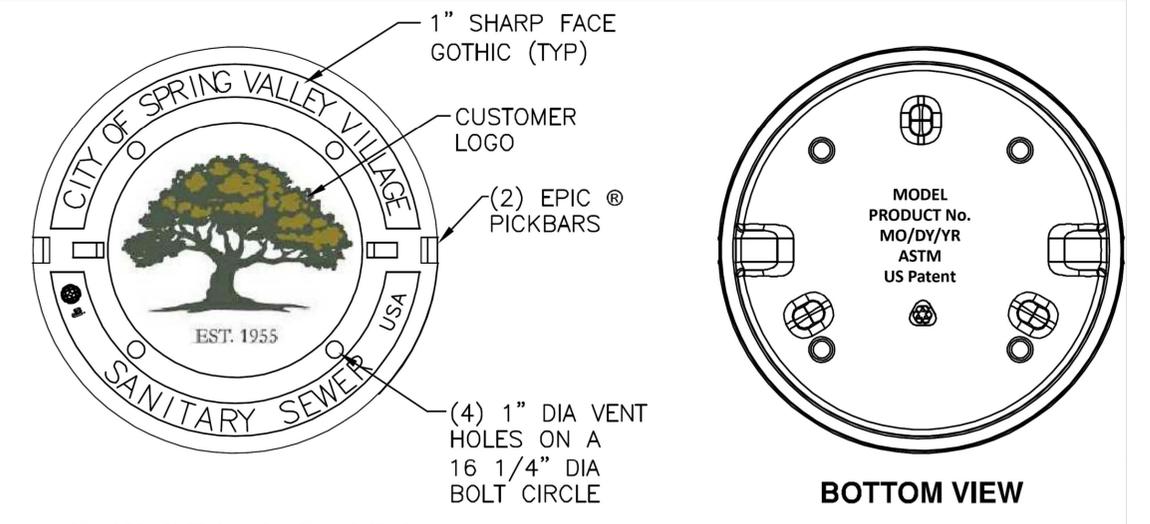


NOTE: LOGO NOT COLORED ON ACTUAL CASTING

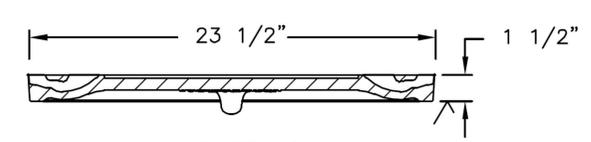


SECTION A-A

PERMISSION GRANTED TO THE CITY OF SPRING VALLEY VILLAGE BY EAST JORDAN IRON WORKS TO USE THIS DESIGN.



NOTE: LOGO NOT COLORED ON ACTUAL CASTING



SECTION

PERMISSION GRANTED TO THE CITY OF SPRING VALLEY VILLAGE BY EAST JORDAN IRON WORKS TO USE THIS DESIGN.



31 7/8" SEWER MANHOLE LID WITH LOGO

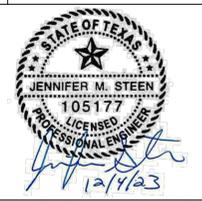
DETAIL: WW-8



23 1/2" SEWER MANHOLE LID WITH LOGO (ONLY FOR EXISTING MANHOLES)

DETAIL: WW-9

NO.	DATE	REVISIONS



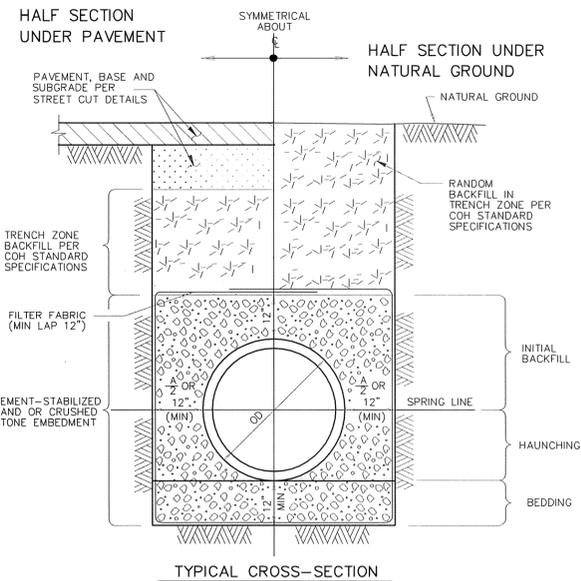
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CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

SANITARY SEWER DETAILS
 (3 OF 4)

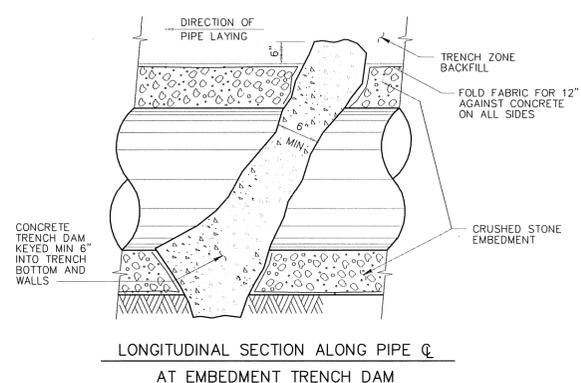
SUBMITTED: 12/04/23	DESIGNED BY: JMS
SCALE: N/A	DRAWN BY: BMG
DATE: 12/04/23	SHEET No.: 65 OF 101
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- NOTES:**
1. MIN TRENCH WIDTH SHALL BE PIPE OD PLUS AN ALLOWANCE "A" FOR THE NOMINAL PIPE SIZE:

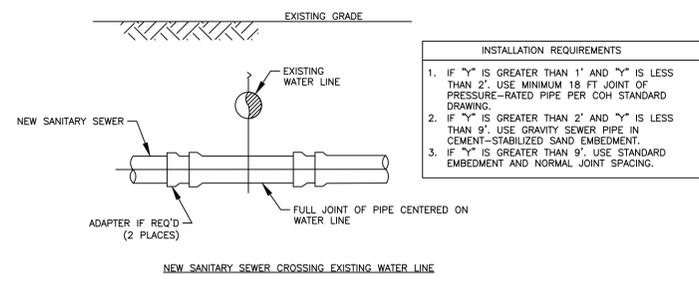
NOMINAL PIPE SIZE	"A"
18" TO 30"	24"
OVER 30"	36"
 2. MAX TRENCH WIDTH SHALL BE NOT GREATER THAN MIN TRENCH WIDTH PLUS 24 INCHES, UNLESS OTHERWISE NOTED.
 3. TRENCH DAM MAY BE FORMED OR UNFORMED. ACTUAL SHAPE OF CONCRETE TRENCH DAM CROSS SECTION MAY BE DETERMINED BY CONTRACTOR IN FIELD, MEETING MINIMUM THICKNESS AND KEY DEPTH REQUIREMENTS.
 4. TRENCH DAM SHALL BE PLACED AT LEAST 5 FT AWAY FROM ANY PIPELINE STRUCTURE. SEE SPECIFICATIONS FOR OTHER REQUIREMENTS.
 5. PLACE TRENCH DAMS IN CLASS I EMBEDMENTS AT THE MIDPOINT OF LINE SEGMENTS LONGER THAN 100 FEET BETWEEN MANHOLES.
 6. CEMENT-STABILIZED SAND IS PREFERRED FOR EMBEDMENT, BUT CRUSHED STONE MAY BE USED ONLY WHEN SPECIFIED ON THE PLANS.

TYPICAL CROSS-SECTION

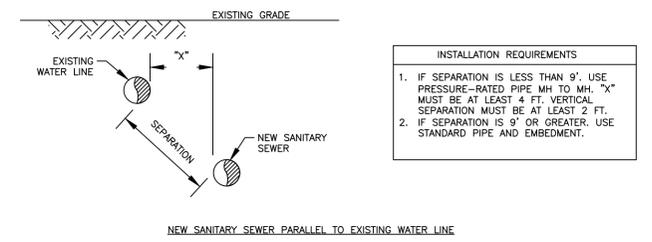


LONGITUDINAL SECTION ALONG PIPE Q AT EMBEDMENT TRENCH DAM

SANITARY SEWER EMBEDMENT AND TRENCH ZONE BACKFILL FOR DRY OR WET STABLE TRENCH



- INSTALLATION REQUIREMENTS**
1. IF "Y" IS GREATER THAN 1' AND "Y" IS LESS THAN 2', USE MINIMUM 18 FT JOINT OF PRESSURE-RATED PIPE PER COH STANDARD DRAWING.
 2. IF "Y" IS GREATER THAN 2' AND "Y" IS LESS THAN 9', USE GRAVITY SEWER PIPE IN CEMENT-STABILIZED SAND EMBEDMENT.
 3. IF "Y" IS GREATER THAN 9', USE STANDARD EMBEDMENT AND NORMAL JOINT SPACING.



- INSTALLATION REQUIREMENTS**
1. IF SEPARATION IS LESS THAN 9', USE PRESSURE-RATED PIPE MH TO MH. "X" MUST BE AT LEAST 4 FT. VERTICAL SEPARATION MUST BE AT LEAST 2 FT.
 2. IF SEPARATION IS 9' OR GREATER, USE STANDARD PIPE AND EMBEDMENT.

SANITARY SEWER INSTALLING SANITARY SEWERS CROSSING OR PARALLEL TO WATER LINES

- NOTES:**
1. SANITARY SEWER MUST BE BELOW WATER LINE WHEREVER POSSIBLE. WHEN WATERLINE IS BELOW THE SANITARY SEWER PROVIDE MINIMUM 2 FT SEPERATION AND INSTALL PIPE IN ACCORDANCE TO CHAPTER 7 TABLE 7.3 OF COH DESIGN MANUAL.
 2. WHEN PRESSURE-RATED PIPE IS REQUIRED, PROVIDE PIPE WITH MINIMUM 150 PSI PRESSURE RATING.
 3. ADAPTERS MUST BE FACTORY MOLDED OR FABRICATED, WITH RING STIFFNESS AT LEAST EQUAL TO THE ADJOINING SANITARY SEWER PIPE, AND USING RESILIENT GASKET OR SEAL MATERIAL. FLEXIBLE RUBBER "BOOT" TYPE ADAPTERS WILL NOT BE ACCEPTED.
 4. INSTALL FORCE MAINS SAME AS FOR GRAVITY SEWER, USING SPECIFIED PRESSURE PIPE.
 5. "Y" MUST ALWAYS BE GREATER THAN OR EQUAL TO 1 FT FOR PRESSURE RATED SS AND 2 FT FOR NON-PRESSURE RATED SS.
 6. "X" MUST BE GREATER THAN OR EQUAL TO 4 FT.
 7. ALTERNATIVES MAY BE SHOWN ON THE DRAWINGS OR DESCRIBED IN THE SPECIFICATIONS.
 8. SEPARATION REQUIREMENTS SHOWN HERE DO NOT APPLY TO SERVICE CONNECTIONS - REFER TO PLUMBING CODE FOR APPLICABLE REQUIREMENTS.

NO.	DATE	REVISIONS



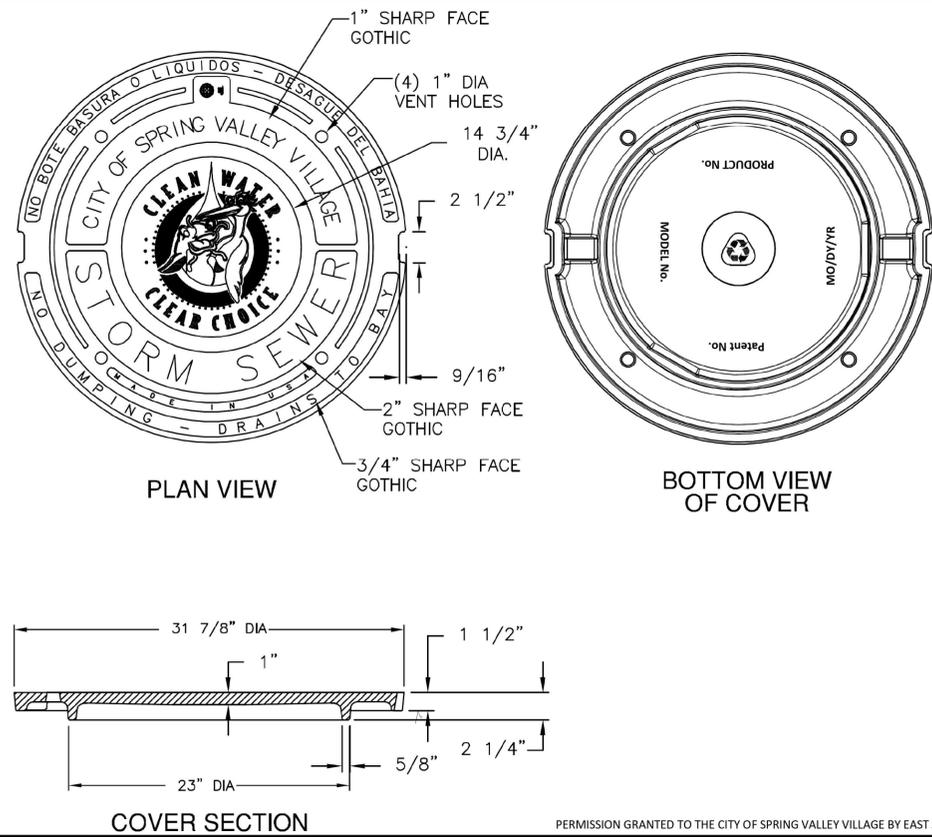
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CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

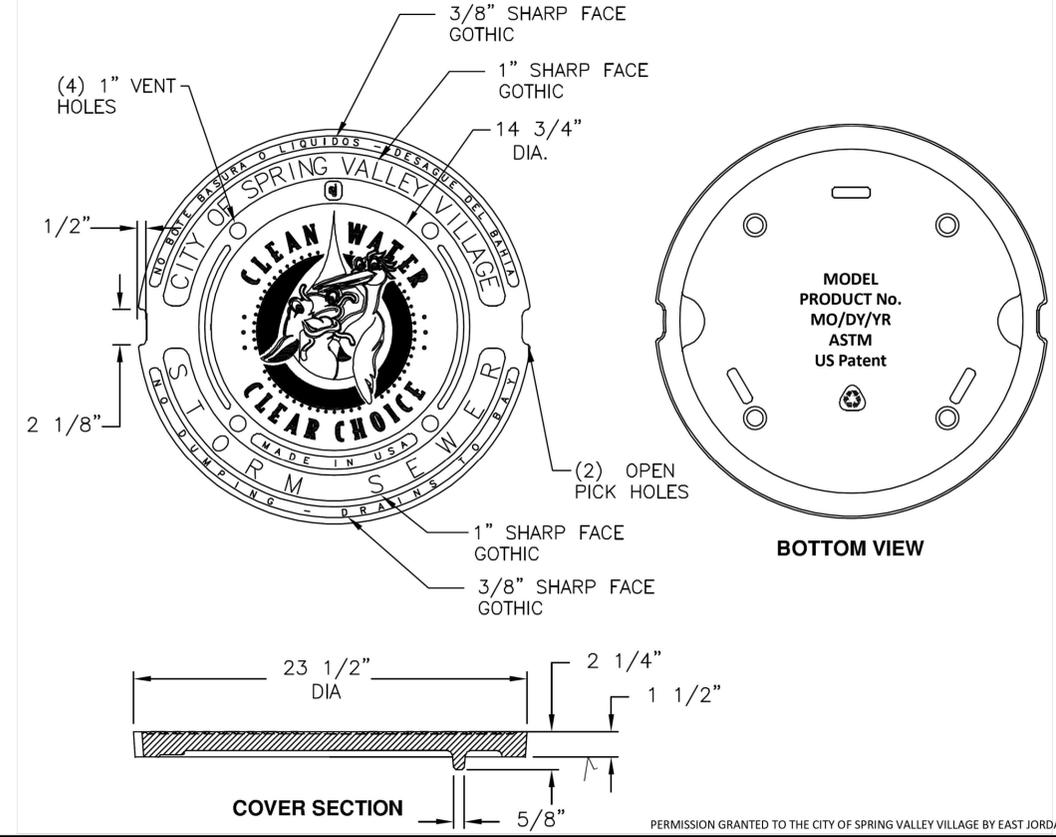
SANITARY SEWER DETAILS
 (4 OF 4)

SUBMITTED: 12/04/23	DESIGNED BY: JMS
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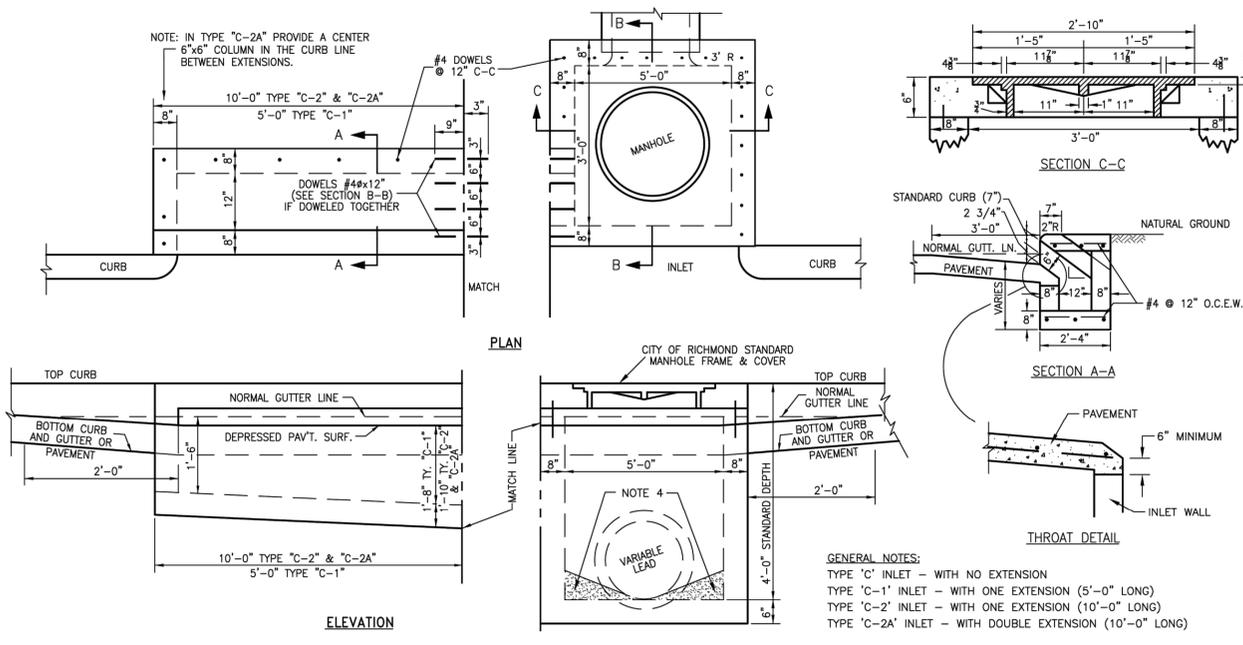
31 7/8" STORMSEWER MANHOLE LID WITH LOGO

DETAIL: WW-10

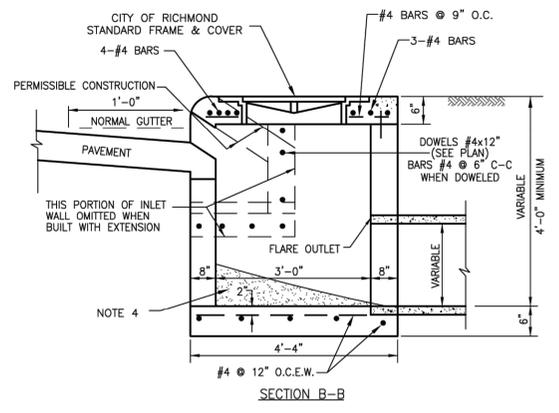


23 1/2" STORMSEWER MANHOLE LID WITH LOGO (ONLY FOR EXISTING MANHOLES)

DETAIL: WW-11



STORM SEWER TYPE 'C' INLET



- NOTES:
- FOR TYPE 'C-2A' INLETS PROVIDE A CENTER 6"x6" COLUMN IN THE CURB LINE BETWEEN ALL EXTENSIONS.
 - CEMENT STABILIZED SAND BACKFILL SHALL BE PLACED A MINIMUM OF 6 INCHES BELOW INLET AND A MINIMUM OF 12 INCHES AROUND INLET TO THE TOP OF STAGE 1 STRUCTURE.
 - ALTERNATIVE REINFORCED CONCRETE WALLS SHALL BE A MINIMUM OF 6" THICK WITH #4 @ 9" O.C.
 - CONCRETE PLACED AND SHAPED TO DRAW.
 - PRECAST OR CAST IN PLACE ONLY.

NO.	DATE	REVISIONS



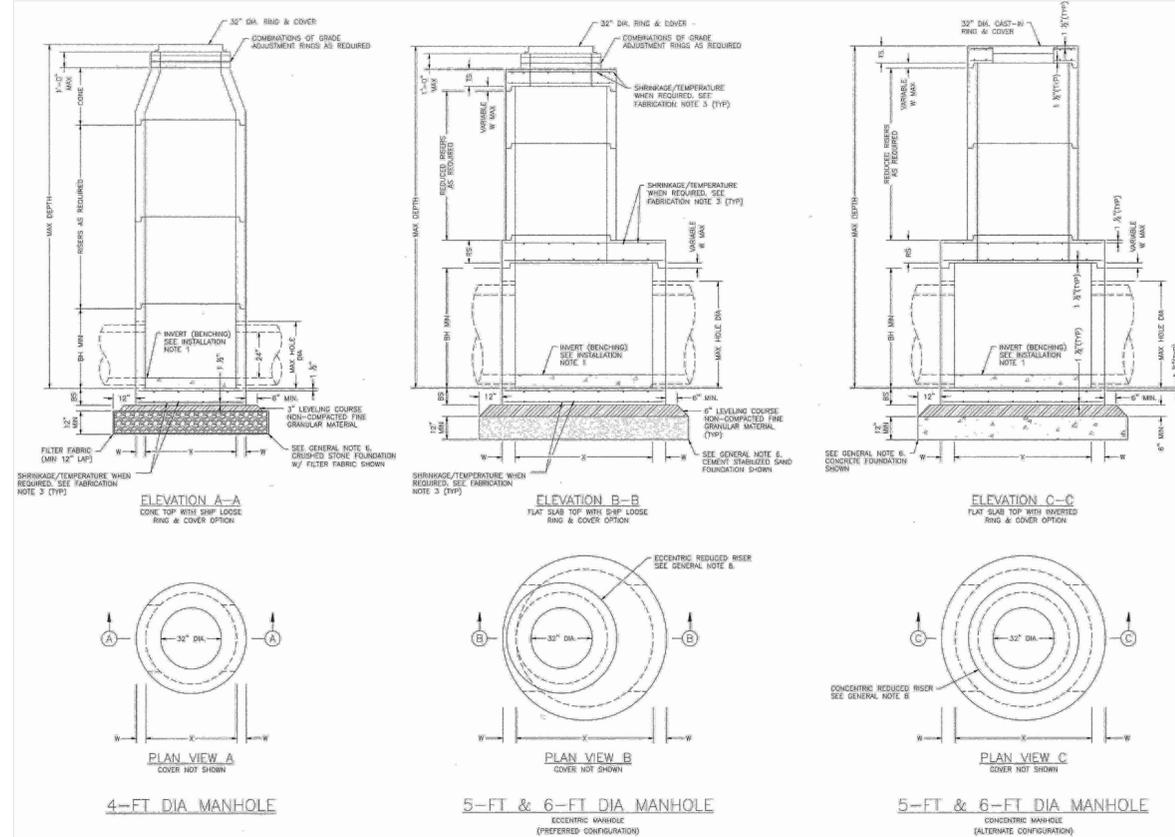
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CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

STORM SEWER DETAILS (1 OF 3)

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FABRICATION NOTES:

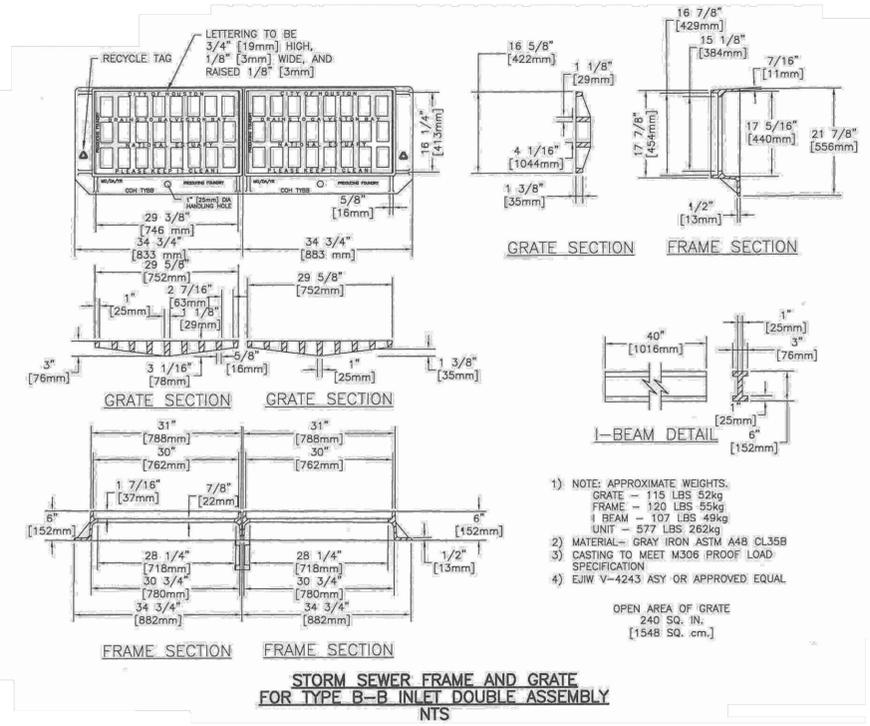
1. PROVIDE CLASS "C" CONCRETE IN ACCORDANCE WITH TEXAS DEPARTMENT OF TRANSPORTATION ITEM 421 AND HAVING A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI.
2. PROVIDE GRADE 60 REINFORCING STEEL ON EQUIVALENT AREA OF WALL. PROVIDE CONCENTRIC REINFORCING STEEL IN VERTICAL WALLS OF SLABS WITH A THICKNESS OF 4" OR GREATER TO RESIST SHRINKAGE AND TEMPERATURE REINFORCING STEEL. PROVIDE STEEL AREA = 0.11 IN²/FT² EACH WAY.
3. MANUFACTURE BASE AND RISERS TO NEAREST 1/8" INCREMENT. DESIGN JOISTS AND GROUND JOISTS FOR FULL-CLOSURE ON BOTH SHOULDERS. MINIMUM SPOT DEPTH IS 3".
4. PROVIDE LIFTING DEVICES IN CONFORMANCE WITH MANUFACTURER'S RECOMMENDATIONS.
5. PROVIDE CAST IRON SOLID COVER, UNLESS NOTED OTHERWISE ELSEWHERE IN THE PLANS.
6. THREE COURSE BRICK OR CONCRETE CURBING SHALL BE USED NEAR THE FINISHED GROUND AND SHOWN. CURBING CAN BE USED WHEN COVER IS SUFFICIENT TO ALLOW FOR JOIST PLACEMENT. FLAT JOIST ARE TO BE USED WHERE COVER IS LIMITED.

INSTALLATION NOTES:

1. IF REQUIRED ELSEWHERE, RISERS (BENCHING) TO BE PROVIDED BY CONTRACTOR. CONCRETE OR MORTAR USED FOR INSERT IS SUBSIDIARY TO THIS ITEM. REFER TO CITY OF HOUSTON SPECIFICATION SECTION 02082 FOR INSERT (BENCHING) REQUIREMENTS.
2. SET CURBING AND GROUND JOISTS WITH PRECAST OR BULK HEADS IN CONFORMANCE WITH MANUFACTURER'S RECOMMENDATIONS. JOISTS AND GROUND JOISTS MAY BE GROTTED NO MORE THAN 1" BETWEEN EACH SECTION, OR 1/2 THE JOIST DEPTH, WHICHEVER IS GREATER.
3. DO NOT GROUT RUBBER GASKET JOINTS WITHOUT MANUFACTURER'S RECOMMENDATION.
4. VERTICAL REGULATION OF GRADE ADJUSTMENT RINGS IS LIMITED TO 1"-0" MAX AS SHOWN.
5. GRADE ADJUSTMENT RINGS MAY BE INCREASED TO 1'-4" MAX WHEN FUTURE CONSTRUCTION AFFECTS FINAL GRADE OF STRUCTURE. MAKE ADJUSTMENTS GREATER THAN 1'-4" WITH ADDITIONAL RISERS. ADJUSTMENTS MAY BE MADE UP TO THE MAX DEPTH OF 25'-0". STRUCTURE MUST BE EVALUATED IF MAX DEPTH WILL BE EXCEEDED.

GENERAL NOTES:

1. SEE TABLE 1 FOR MINIMUM DESIGN REQUIREMENTS. CONCENTRIC RISER WITH RESPECT TO BASE (ALTERNATIVE CONFIGURATION) FALLS OUTSIDE THE SCOPE OF REQUIREMENTS PROVIDED. ENGINEER OF RECORD ACCEPTS RESPONSIBILITY FOR SAFETY AND ADEQUACY OF MANHOLE IF ALTERNATIVE CONFIGURATION IS USED.
2. PRECAST CONCRETE MANHOLES PER SECTION 02082 PRECAST CONCRETE MANHOLES.
3. PIPE OD + PLACEMENT TOLERANCE MUST BE EQUAL OR LESS THAN MAX HOLE DIA. FOR RIGID PIPE. PLACEMENT TOLERANCE IS 1/8" MAX. 2" MAX FOR FLEXIBLE PIPE. CONSULT MANUFACTURER'S SPECIFICATION FOR PLACEMENT TOLERANCE.
4. STORM WATER SEWER PIPE INTERNAL DIA. SHALL NOT BE LESS THAN 24".
5. FOUNDATION/SUBGRADE TO BE DESIGNED BY ENGINEER AND MEET MINIMUM REQUIREMENTS ACCORDING TO SECTION 02082.
6. ALL STORY WATER MANHOLES ARE TO BE PRECAST CONCRETE, UNLESS OTHERWISE NOTED ELSEWHERE IN THE PLANS.
7. ALL EXISTING RISERS WITH RESPECT TO BASE IS THE PREFERRED MANHOLE CONFIGURATION. CONCENTRIC REDUCED RISER WITH RESPECT TO BASE MANHOLE CONFIGURATION IS AN ALTERNATIVE DESIGN THAT WILL BE ACCEPTED BASED ON THE NEEDS OF THE CITY OF HOUSTON. CONES MAY BE CONCENTRIC OR ECCENTRIC. REDUCTION CONES ARE ACCEPTABLE. REFER TO MANUFACTURER FOR CONE DIMENSIONS.
8. MANHOLE SIZE SHALL CONSIDER ENGINEERING ECONOMY. THIS DETAIL IS NOT APPLICABLE TO ROUND MANHOLES LARGER THAN 6-FOOT DIA.



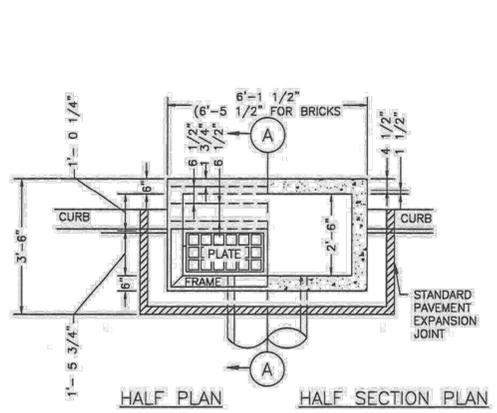
- 1) NOTE: APPROXIMATE WEIGHTS.
GRATE - 115 LBS 52kg
FRAME - 120 LBS 55kg
I BEAM - 107 LBS 49kg
UNIT - 577 LBS 262kg
 - 2) MATERIAL - GRAY IRON ASTM A48 CL35B
 - 3) CASTING TO MEET M306 PROOF LOAD SPECIFICATION
 - 4) EUJW V-4243 ASY OR APPROVED EQUAL
- OPEN AREA OF GRATE
240 SQ. IN.
[1548 SQ. CM.]

TABLE 1
PRECAST ROUND MANHOLE (PRM) MINIMUM REQUIREMENTS FOR 24 IN. TO 42 IN. INTERNAL DIA. STORM SEWER PIPES

SIZE	BASE SLAB THICKNESS		BASE LIMIT OR RISER THICKNESS		REDUCED RISER DIA.		REDUCING SLAB THICKNESS		TOP SLAB THICKNESS		MAX DEPTH TO TOP OF BOX SLAB		MAX HEIGHT		MAX HOLE DIA.	
	FT	IN.	IN.	IN.	IN.	IN.	IN.	IN.	FT	IN.	IN.	IN.	IN.	IN.	IN.	IN.
4	9	3	3	-	-	9	23	42	35	9	25	42	42	55	55	42
5	9	6	6	48	9	9	25	42	42	9	25	42	42	55	55	42
6	9	9	9	40/50	12	9	25	42	42	9	25	42	42	55	55	42

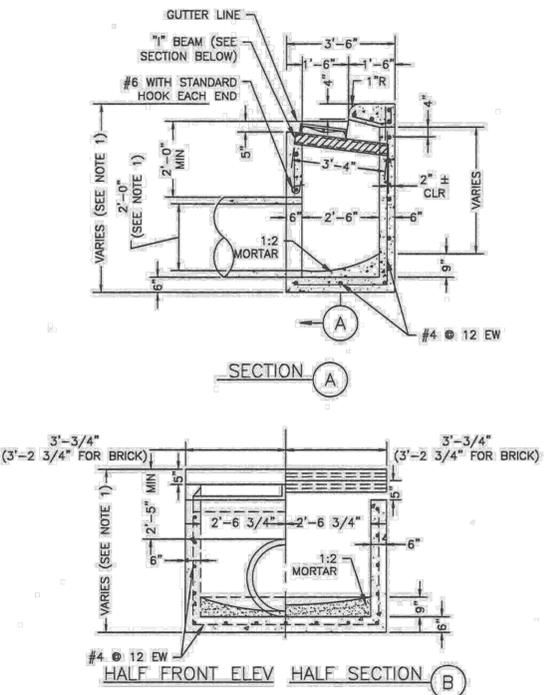
(*) 60-IN REDUCED RISER IS TO BE USED WHEN DEEMED NECESSARY TO SATISFY WALL PENETRATION SPACING REQUIREMENTS.

STORM SEWER TYPE 'C' PRECAST ROUND MANHOLE

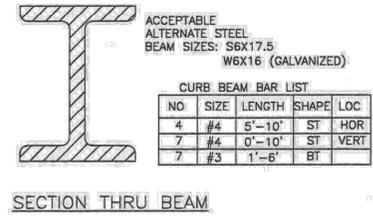


GENERAL NOTES:

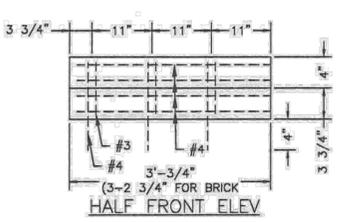
USE STANDARD CAST IRON FRAME & PLATES.
LEAD SHALL LEAVE INLET AT LOCATION AND GRADE REQUIRED.



STORM SEWER TYPE "B-B" INLET NTS



- NOTES:**
1. DIMENSION VARIES BASED ON PIPE DIAMETER AND WALL THICKNESS.
 2. CENTER REINFORCING IN SLAB AND WALLS. CENTER STEEL BEAM ON INLET AND CAST INTO WALLS AS SHOWN.
 3. WHEN TOP OF CURB TO FLOWLINE IS GREATER THAN 8 FEET USE TYPE "C" INLET.



PRECAST CURB BEAM

NO.	DATE	REVISIONS

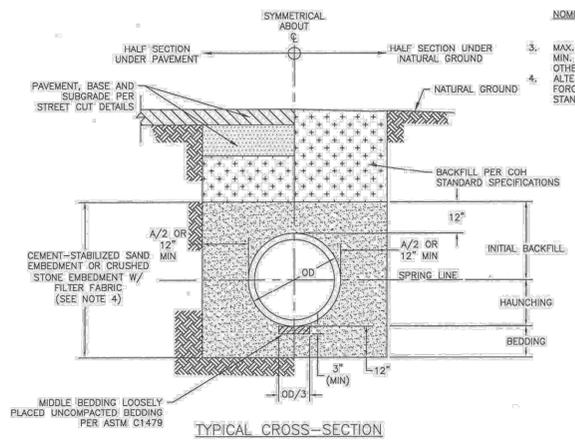
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CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

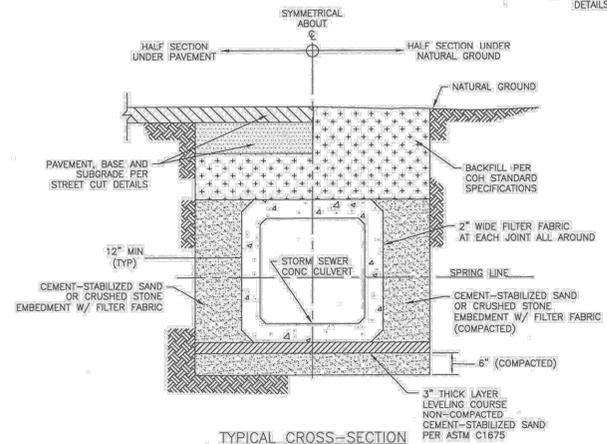
STORM SEWER DETAILS (2 OF 3)

SUBMITTED: 12/04/23	DESIGNED BY: JMS
SCALE: N/A	DRAWN BY: AA
DATE: 12/04/23	SHEET No.: 68 OF 101
SURVEY BY: CFA	DWG. No.:
F B No.:	



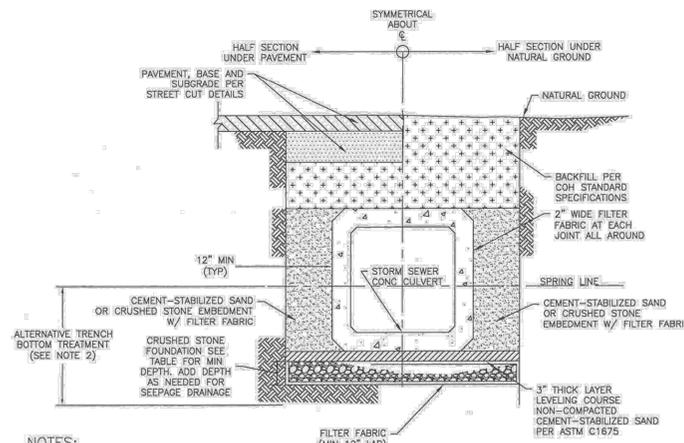
SANITARY OR STORM SEWER BEDDING AND BACKFILL FOR DRY STABLE TRENCH
NTS

- NOTES:**
- THIS DETAIL MAY BE USED ONLY FOR DRY STABLE TRENCH CONDITIONS PER COH STANDARD. SEE COH STANDARD SPECIFICATION FOR REQUIREMENTS IN OTHER CONDITIONS.
 - MIN. TRENCH WIDTH SHALL BE PIPE OD PLUS AN ALLOWANCE "A" FOR THE NOMINAL PIPE SIZE:
- | NOMINAL PIPE SIZE | "A" |
|-------------------|-----|
| 18" TO 30" | 24" |
| OVER 30" | 36" |
- MAX. TRENCH WIDTH SHALL BE NOT GREATER THAN MIN. TRENCH WIDTH PLUS 24 INCHES, UNLESS OTHERWISE NOTED.
 - ALTERNATIVE EMBEDMENT BACKFILL MATERIALS FOR FORCE MAINS MAY BE ALLOWED. SEE COH STANDARD SPECIFICATIONS.



PRECAST CONCRETE BOX STORM SEWER BEDDING AND BACKFILL FOR DRY STABLE TRENCH
NTS

- NOTES:**
- WHERE MULTIPLE BOX SEWER ARE USED IN THE SAME TRENCH, MIN. OUTSIDE TO OUTSIDE BOX SEWER SEPERATION SHALL BE 6".
 - SUBGRADE AND PAVEMENT FOR STREET CUT DETAILS - 02951.



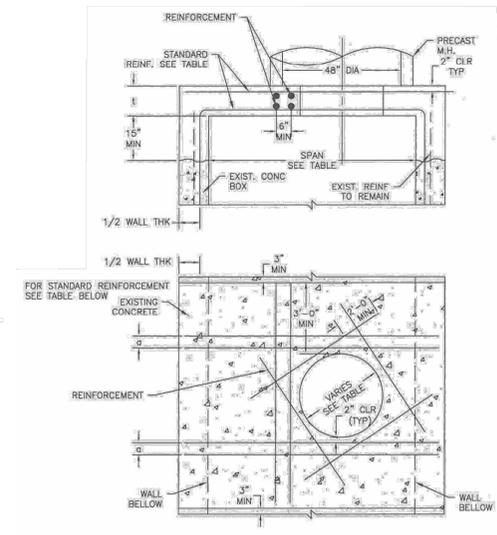
PRECAST CONCRETE BOX STORM SEWER BEDDING AND BACKFILL WITH SEAL SLAB
NTS

- NOTES:**
- WHERE MULTIPLE BOX SEWER ARE USED IN THE SAME TRENCH, MIN. OUTSIDE TO OUTSIDE BOX SEWER SEPERATION SHALL BE 6".
 - ALTERNATIVE TRENCH BOTTOM TREATMENT MAY BE USED AS APPROVED BY THE CITY OF ENGINEERS AND AS PAID FOR IN THE PROPOSAL.

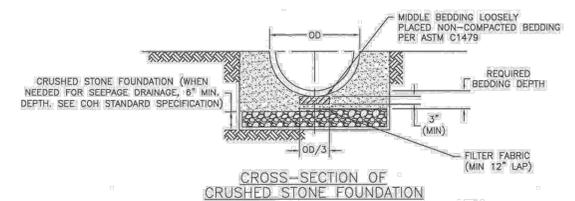
CULVERT SIZE (FT)	FOUNDATION DEPTH(INCHES)
3' X 2' TO 6' X 6'	12
6' X 6' AND LARGER	18

- NOTES:**
- WHERE MULTIPLE BOX SEWER ARE USED IN THE SAME TRENCH, MIN OUTSIDE TO OUTSIDE BOX SEWER SEPERATION SHALL BE 6".
 - REINFORCED CONCRETE SLAB PIPE BEDDING TO BE PLACED IN DRY TRENCH ONLY.
 - CONCRETE IN SLAB TO REACH MIN COMPRESSIVE STRENGTH OF 1000 PSI BASED ON MAX DESIGN BEFORE PIPE IS LAID.
 - PRECAST SEAL SLAB MAYBE USED AS APPROVED BY CITY ENGINEER.

PRECAST CONCRETE BOX STORM SEWER BEDDING AND BACKFILL WITH SEAL SLAB
NTS

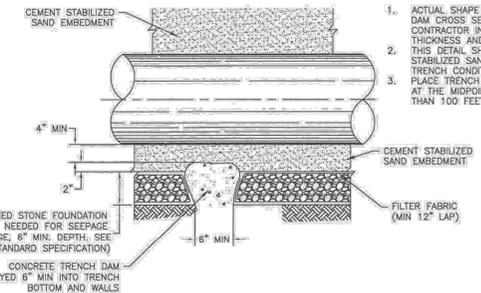


PROPOSED MANHOLE ON EXISTING BOX STORM SEWER
NTS



CROSS-SECTION OF CRUSHED STONE FOUNDATION

- NOTES:**
- ACTUAL SHAPE OF CONCRETE TRENCH DAM CROSS SECTION MAY BE DETERMINED BY CONTRACTOR IN FIELD, MEETING MINIMUM THICKNESS AND KEY DEPTH REQUIREMENTS.
 - THIS DETAIL SHALL BE USED WITH CEMENT STABILIZED SAND EMBEDMENT, IN WET STABLE TRENCH CONDITIONS.
 - PLACE TRENCH DAMS IN CLASS I EMBEDMENTS AT THE MIDPOINT OF LINE SEGMENTS LONGER THAN 100 FEET BETWEEN MANHOLES.



LONGITUDINAL SECTION ALONG PIPE @ AT FOUNDATION TRENCH DAM

SANITARY OR STORM SEWER CRUSHED STONE FOUNDATION FOR WET STABLE TRENCH
NTS

NO.	DATE	REVISIONS



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CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

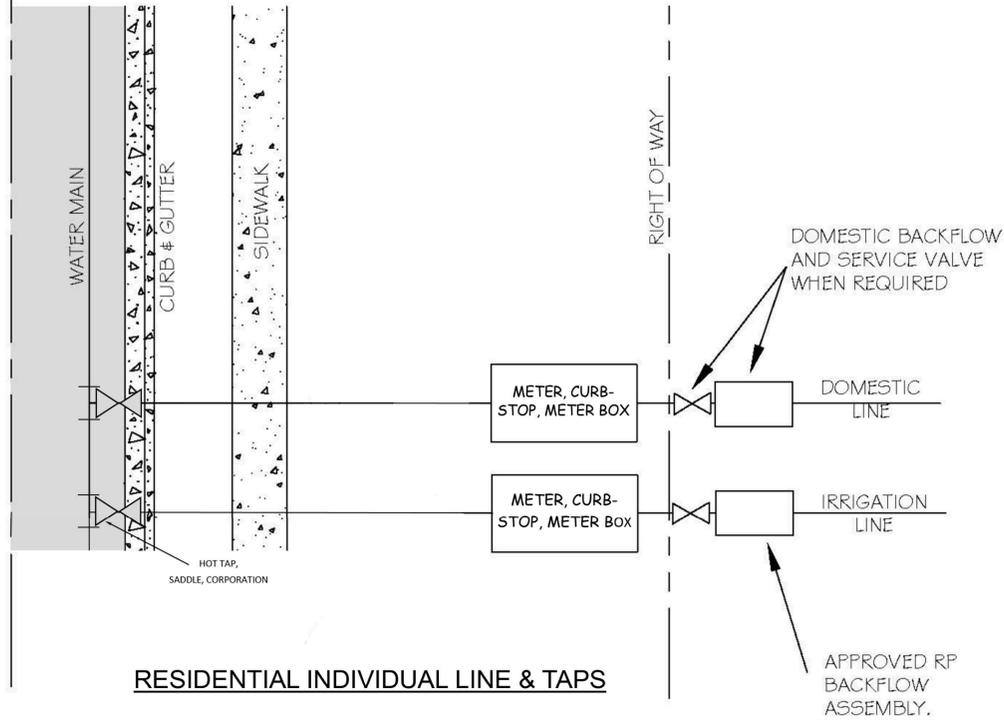
STORM SEWER DETAILS (3 OF 3)

SUBMITTED: 12/04/23	DESIGNED BY: JMS
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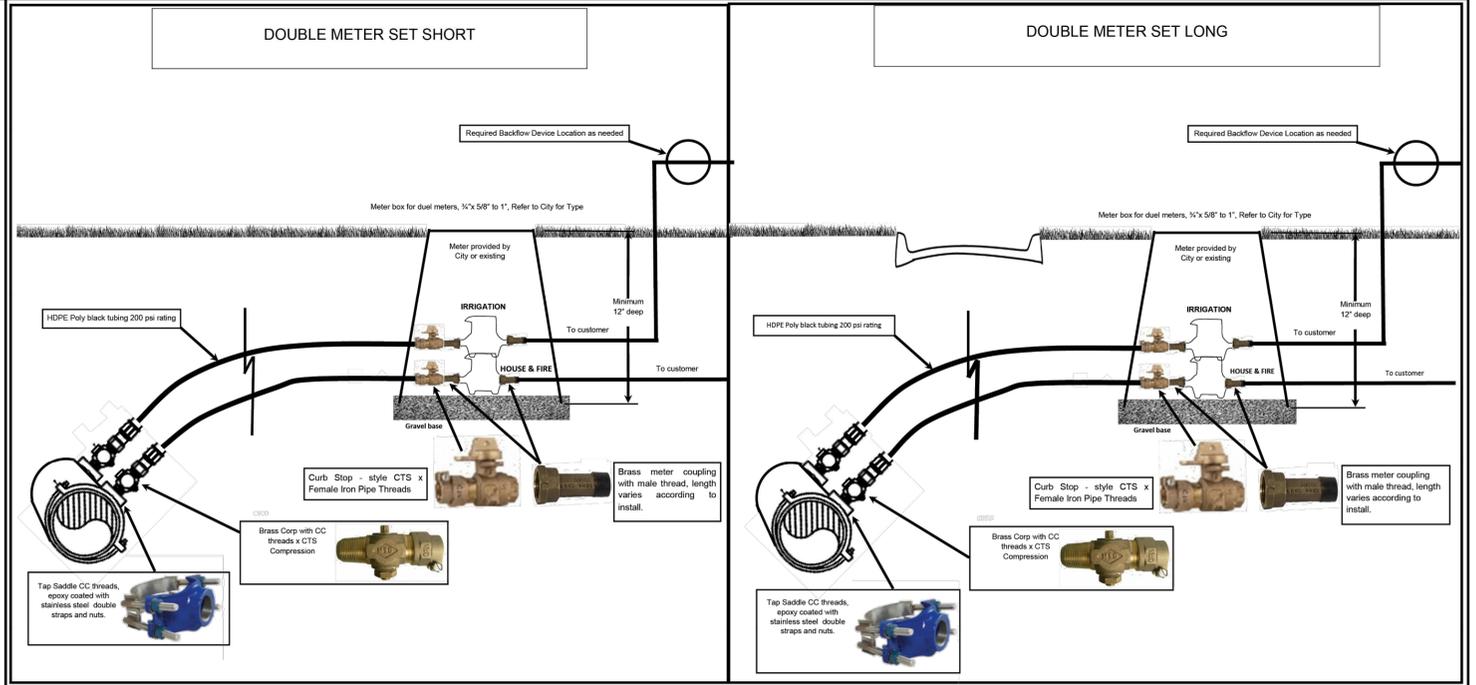
NOTE: DETAIL FOR CITY PAVEMENT & UTILITY PROJECTS WHERE THE WATER MAIN OR CUSTOMER WATER SERVICE LINE IS REPLACED AS PART OF THE PROJECT IN THE ROW.

NOTES:

1. IRRIGATION METER SHALL BE LOCATED ON THE SIDE OF DOMESTIC METER WITH INCREASING ADDRESSES.
2. THE BACKFLOW SHALL BE INSTALLED BETWEEN THE METER AND THE HOUSE AND BEFORE ANY CONNECTIONS ON THE LINE ACCORDING TO TCEQ AND CITY ADOPTED PLUMBING CODE STANDARDS.
3. THE BACKFLOW HAS TO BE TESTED WHEN INSTALLED AND TESTED PERIODICALLY ACCORDING TO TCEQ AND CITY REQUIREMENTS.
4. THE BACKFLOW WILL NEED TO BE INSTALLED AT AN ACCESSIBLE LOCATION.
5. DEVICES MUST BE INSTALLED ACCORDING TO TCEQ AND CITY ADOPTED PLUMBING CODE REQUIREMENTS.



RESIDENTIAL INDIVIDUAL LINE & TAPS



NOTE:

1. DETAIL FOR CITY PAVEMENT & UTILITY PROJECTS WHERE THE WATER MAIN OR CUSTOMER SERVICE LINE IS REPLACED AS PART OF THE PROJECT IN THE ROW.
2. FOR NEW TAPS ON AN EXISTING WATER LINES NOT PART OF A CITY PROJECT, CITY WILL INSTALL THE WATER TAP. TAP FEES WILL APPLY ACCORDING TO THE CURRENT PROVISIONS OF ARTICLE 6.000 - UTILITY SERVICE CHARGES ORDINANCE.
3. FOR A CITY PROJECT REQUIRING A NEW METER, THE METER SHALL BE PURCHASED OR SUPPLIED THROUGH THE CITY TO INSURE COMPATIBILITY WITH THE CURRENT METER READING SYSTEM.
4. IF THE METER IS NOT INSTALLED IMMEDIATELY AND IF A METER IS NEEDED, THE LINE OR CURB WILL BE CAPPED TO PREVENT ANY CONTAMINANTS FROM ENTERING THE CITY SYSTEM.



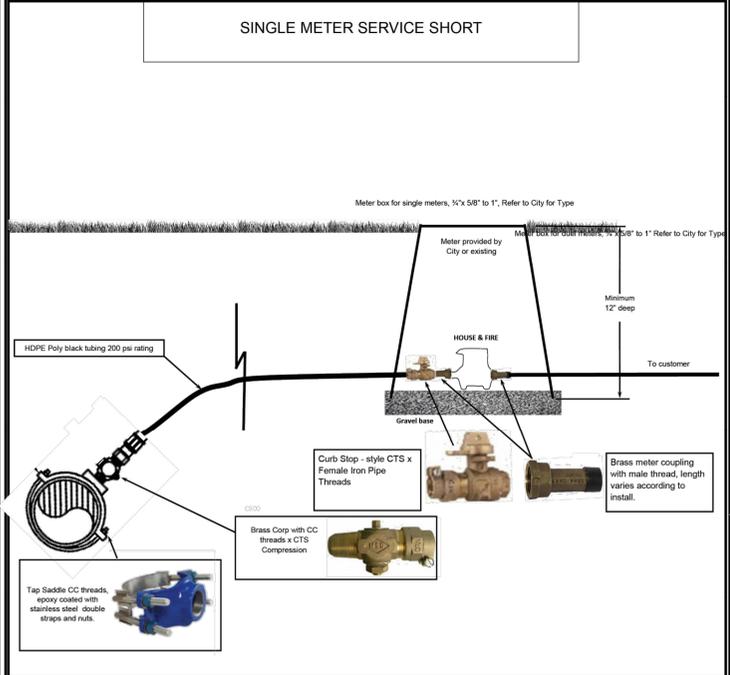
METER SETS

DETAIL: W-1



DOUBLE WATER TAP & METER SET

DETAIL: W-2



NOTE:

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SINGLE TAP & METER SET

DETAIL: W-3

NO.	DATE	REVISIONS



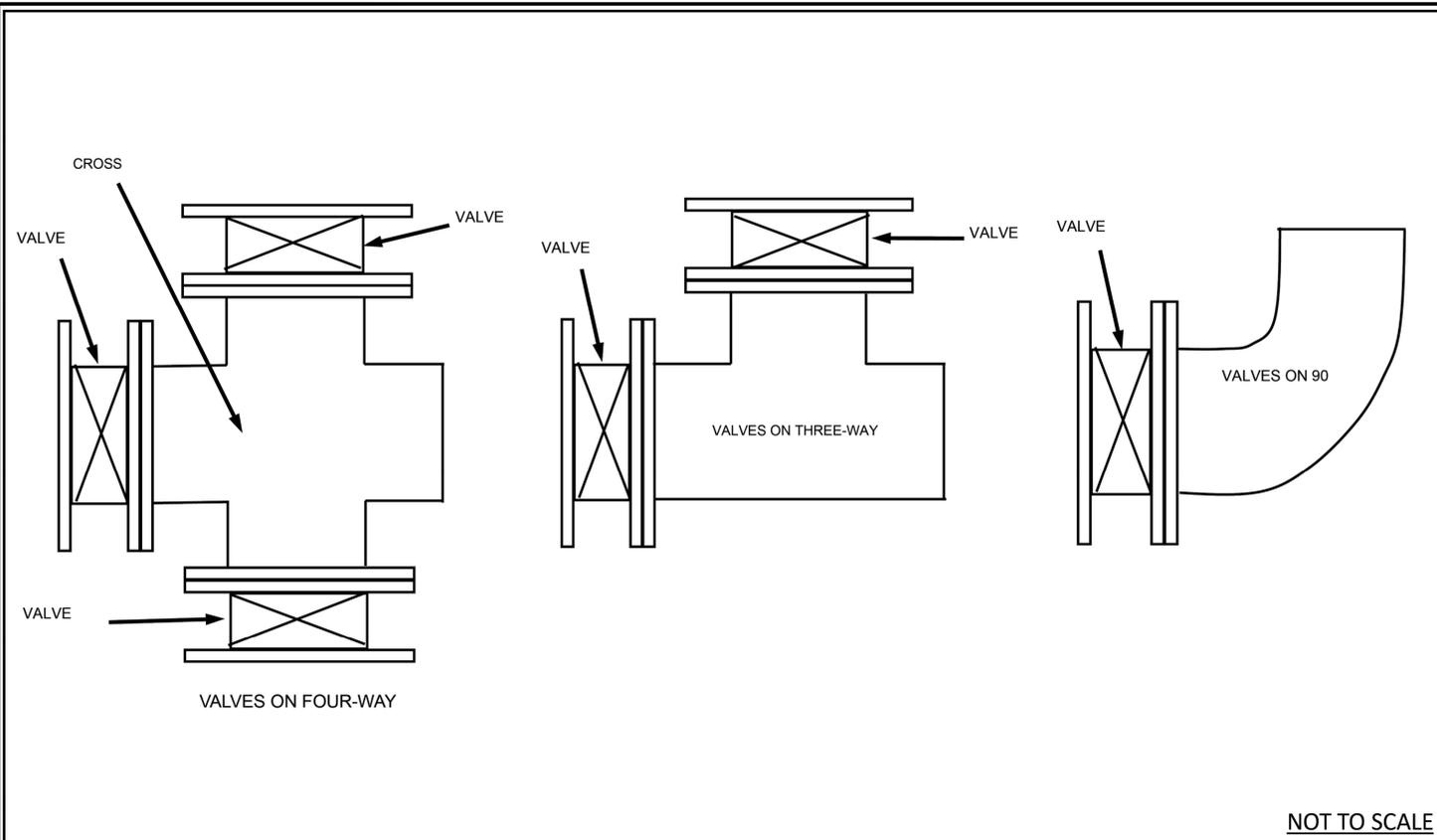
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CITY OF SPRING VALLEY VILLAGE

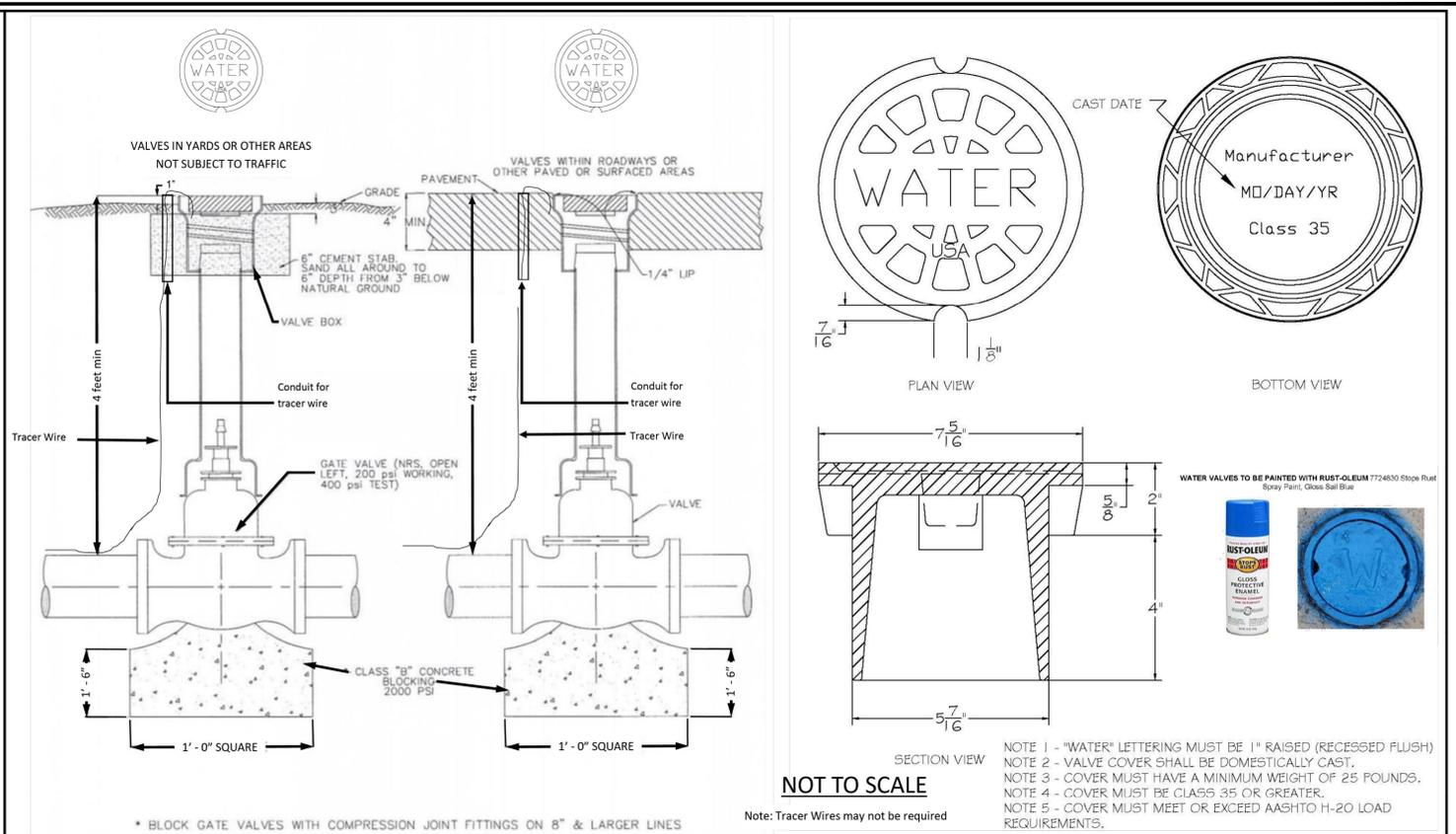
BRIGHTON PLACE RECONSTRUCTION

WATER DETAILS
(1 OF 4)

SUBMITTED: 12/04/23	DESIGNED BY: JMS
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DATE: 12/04/23	SHEET No.: 70 OF 101
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F B No.: -	



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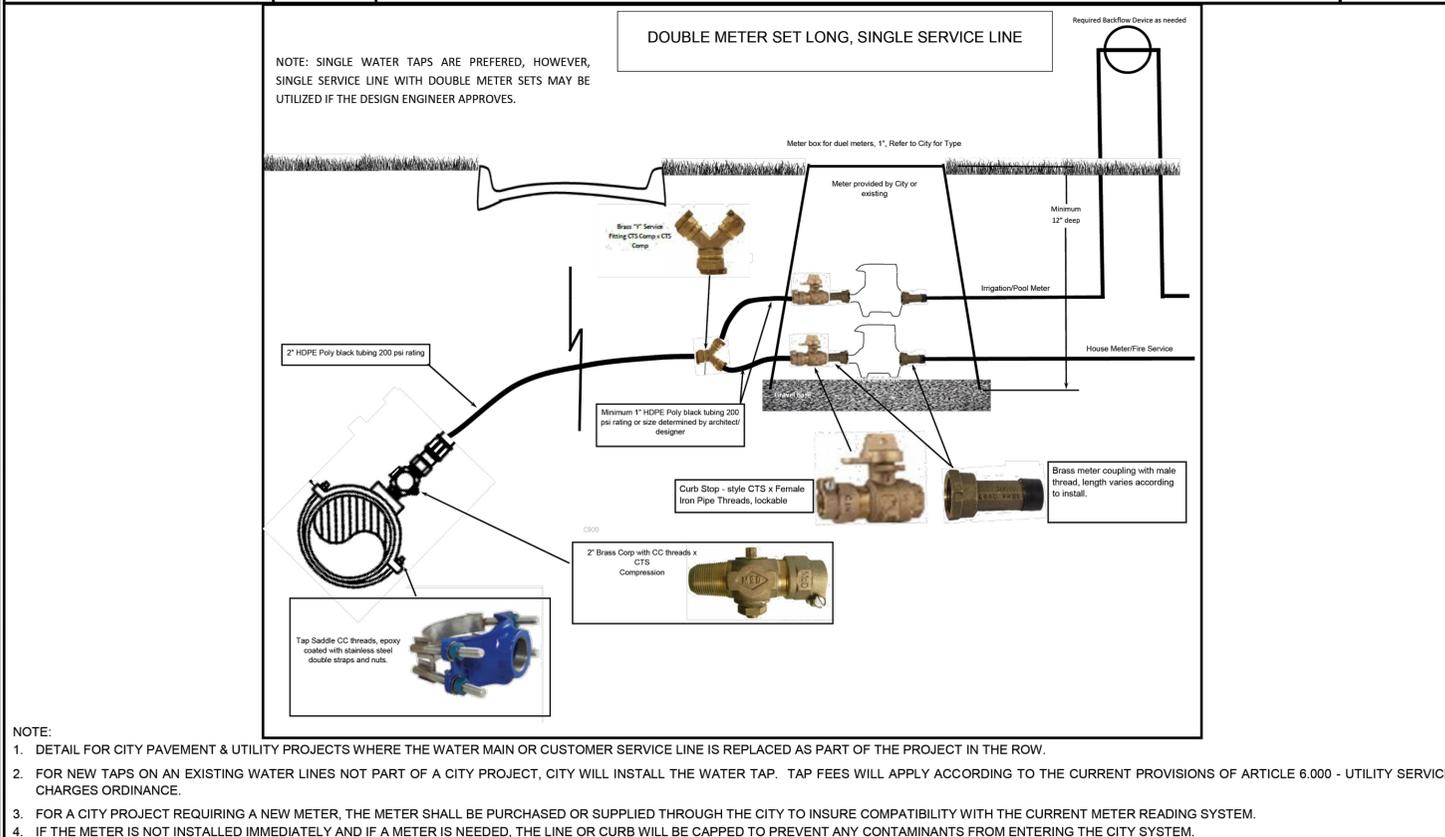


NOT TO SCALE

NOTE 1 - "WATER" LETTERING MUST BE 1/8" RAISED (RECESSED FLUSH)
 NOTE 2 - VALVE COVER SHALL BE DOMESTICALLY CAST.
 NOTE 3 - COVER MUST HAVE A MINIMUM WEIGHT OF 25 POUNDS.
 NOTE 4 - COVER MUST BE CLASS 35 OR GREATER.
 NOTE 5 - COVER MUST MEET OR EXCEED AASHTO H-20 LOAD REQUIREMENTS.

EST. 1955 **SPRING VALLEY VILLAGE** **VALVE PLACEMENT ON CITY MAINS** **DETAIL: W-5**

EST. 1955 **SPRING VALLEY VILLAGE** **VALVE BOX DETAIL WITH TRACER WIRE (IF APPLICABLE)** **DETAIL: W-6**



- NOTE:
1. DETAIL FOR CITY PAVEMENT & UTILITY PROJECTS WHERE THE WATER MAIN OR CUSTOMER SERVICE LINE IS REPLACED AS PART OF THE PROJECT IN THE ROW.
 2. FOR NEW TAPS ON AN EXISTING WATER LINES NOT PART OF A CITY PROJECT, CITY WILL INSTALL THE WATER TAP. TAP FEES WILL APPLY ACCORDING TO THE CURRENT PROVISIONS OF ARTICLE 6.000 - UTILITY SERVICE CHARGES ORDINANCE.
 3. FOR A CITY PROJECT REQUIRING A NEW METER, THE METER SHALL BE PURCHASED OR SUPPLIED THROUGH THE CITY TO INSURE COMPATIBILITY WITH THE CURRENT METER READING SYSTEM.
 4. IF THE METER IS NOT INSTALLED IMMEDIATELY AND IF A METER IS NEEDED, THE LINE OR CURB WILL BE CAPPED TO PREVENT ANY CONTAMINANTS FROM ENTERING THE CITY SYSTEM.

EST. 1955 **SPRING VALLEY VILLAGE** **LONG TAP SINGLE SERVICE LINE DOUBLE METER SET** **DETAIL: W-4**

NO.	DATE	REVISIONS



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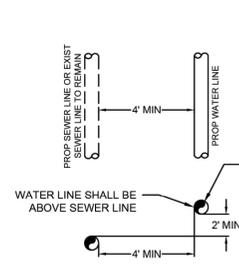
CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

WATER DETAILS
 (2 OF 4)

SUBMITTED: 12/04/23	DESIGNED BY: JMS
SCALE: N/A	DRAWN BY: BMG
DATE: 12/04/23	SHEET No.: 71 OF 101
SURVEY BY: CFA	DWG. No.:
F B No.: -	

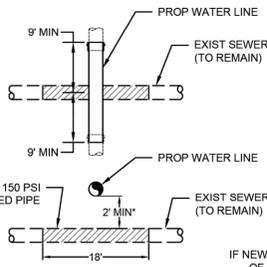
D:\PROJECTS\2022\12056_CITY_OF_SPRING_VALLEY_VILLAGE\01_BRIGHTON_PLACE_RECONSTRUCTION\400_CAD\412_MUN\ SHEETS\2212-056_DET_WATER.DWG



1
TCEQ CH. 290.44 (e)(4)(A)
PUBLIC WATER PARALLELS
PUBLIC SEWER LINE

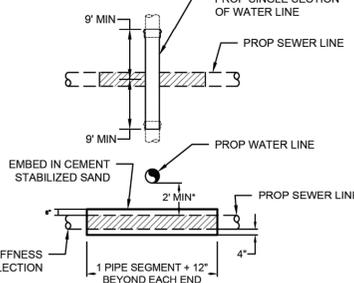
- When new potable water lines are installed they shall be no closer than 9 feet in any direction to an existing wastewater collection facility. If 9 feet cannot be observed then the following criteria shall apply.
 - When the lines are running parallel to one another the horizontal distance between wastewater main and waterline shall be at least 4 feet and the vertical distance shall be at least 2 feet. The engineer must first determine that the existing wastewater main or lateral is not leaking.

A wastewater collection system pipe must be below a public water supply pipe.
 - If the engineer cannot determine if the existing wastewater line is leaking it shall be replaced with 150 psi pressure rated pipe.
 - Where a new potable water line parallels a new wastewater main, the wastewater line shall be constructed of 150 psi pressure rated pipe. The waterline shall be located a minimum of 2 feet vertically and 4 feet horizontally from the wastewater main.

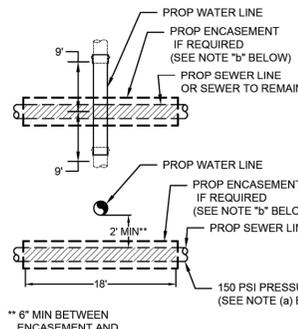


2
TCEQ CH. 290.44 (e)(4)(B)(i-ii)
NEW PUBLIC WATER CROSSES
EXIST PUBLIC SEWER LINE
(SEE NOTES 1-3 BELOW)

- Where new potable waterline crosses an existing or new wastewater main or lateral, one segment of the waterline pipe shall be centered over the waste water line such that the joints of the waterline pipe are equidistant and at least nine feet horizontally from the centerline of the wastewater line. Whenever possible, the crossing shall be centered between the joints of the wastewater line. If the new wastewater pipe has a standard segment length of less than 18 feet, the requirement for scenario 4 shall apply.
 - If the existing wastewater main or lateral is disturbed or shows signs of leaking, it shall be replaced for at least nine feet in both directions (18 feet total) centered at the new water line with at least 150 psi pressure rated pipe.
 - If the waterline crosses non-pressure rated wastewater main or lateral the potable waterline pipe shall be no less than 2 feet above the wastewater line. If the waterline crosses a pressure rated wastewater line it shall be at least 6 inches above the wastewater main or lateral.
 - Where a new potable waterline crosses a new, non-pressure rated wastewater main or lateral, the wastewater pipe shall have a minimum pipe stiffness of 115 psi at 5% deflection. Where a new potable waterline crosses a new, pressure rated wastewater main or lateral, the wastewater pipe shall have a minimum pressure rating of 150 psi. The wastewater main or lateral shall be embedded in cement stabilized sand for the total length of one pipe segment plus 12 inches beyond the joint on each end.
 - Where a new potable waterline crosses a new wastewater main or lateral, (pressure rated or non-pressure rated), the wastewater main or lateral shall be embedded in cement stabilized sand for the total length of one pipe segment plus 12 inches beyond the joint on each end.
 - Where cement stabilized sand bedding is required, the cement stabilized sand shall have a minimum of 10% cement per cubic yard of cement stabilized sand mixture, based on loose dry weight volume (at least 2.5 bags of cement per cubic yard of mixture). The cement stabilized sand bedding shall be a minimum of 6 inches above and 4 inches below the wastewater main or lateral. The use of brown coloring in cement stabilized sand for wastewater main or lateral bedding is recommended for the identification of pressure rated wastewater mains during future construction.

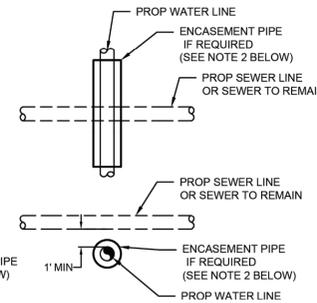


3
TCEQ CH. 290.44 (e)(4)(B)(iii,v,vi)
NEW PUBLIC WATER CROSSES
NEW PUBLIC SEWER LINE
(SEE NOTES 1,3-6 BELOW)

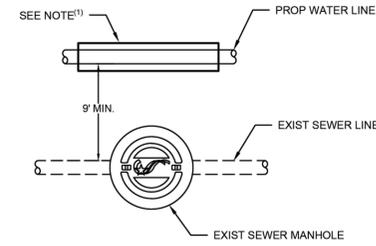


4A
TCEQ CH. 290.44 (e)(4)(B)(iv)(I-II)
NEW PUBLIC WATER LINE CROSSES
NEW PUBLIC SEWER LINE
(SEE NOTE 1 BELOW)

- When a new potable waterline crosses a new, non-pressure rated wastewater main or lateral and a standard length of the wastewater pipe is less than 18 feet in length, the potable water pipe segment shall be centered over the wastewater line. The materials and method of installation shall conform to one of the following options.
 - Within nine feet horizontally of either side of the waterline, the wastewater pipe and joints shall be constructed with pipe material having a minimum pressure rating of at least 150 psi. An absolute minimum vertical separation distance of two feet shall be provided. The wastewater main or lateral shall be located below the waterline.
 - All sections of wastewater main or lateral within nine feet horizontally of the waterline shall be encased in an 18-foot (or longer) section of pipe. Flexible encasing pipe shall have a minimum pipe stiffness of 115 psi at 5.0% deflection. The encasing pipe shall be centered on the waterline and shall be at least two nominal pipe diameters larger than the wastewater main or lateral. The space around the carrier pipe shall be supported at five-foot (or less) intervals with spacers or be filled to the springline with washed sand. Each end of the casing shall be sealed with watertight non-shrink cement grout or a manufactured watertight seal. An absolute minimum separation distance of six inches between the encasement pipe and the waterline shall be provided. The wastewater line shall be located below the waterline.
- When a new waterline crosses under a wastewater main or lateral, the waterline shall be encased as described for wastewater mains or laterals in subclause (I) of this clause or constructed of ductile iron or steel pipe with mechanical or welded joints as appropriate. An absolute minimum separation distance of one foot between the waterline and the wastewater main or lateral shall be provided. Both the waterline and wastewater main or lateral must pass a pressure and leakage test as specified in AWWA C600 standards.



4B
TCEQ CH. 290.44 (e)(4)(B)(iv)(III)
NEW PUBLIC WATER CROSSES UNDER
EXIST PUBLIC SEWER LINE
(SEE NOTE 2 BELOW)

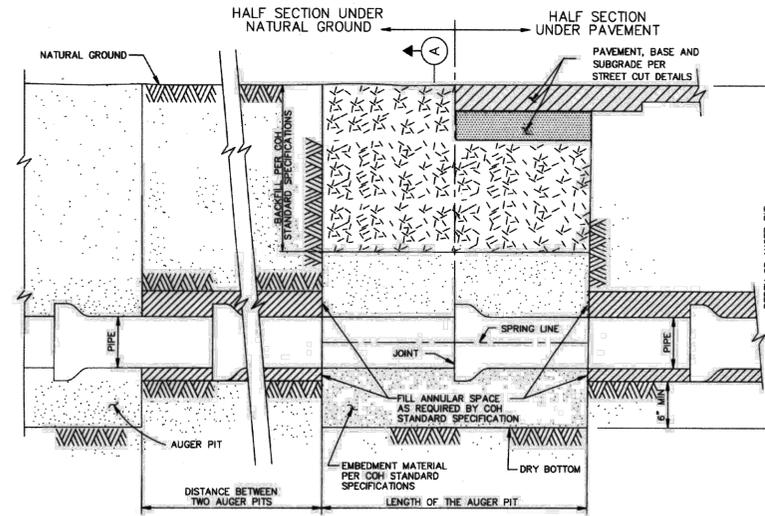


5
TCEQ CH. 290.44 (e)(5)
PUBLIC WATER LINE WITHIN
9FT OF PUBLIC SEWER MANHOLE

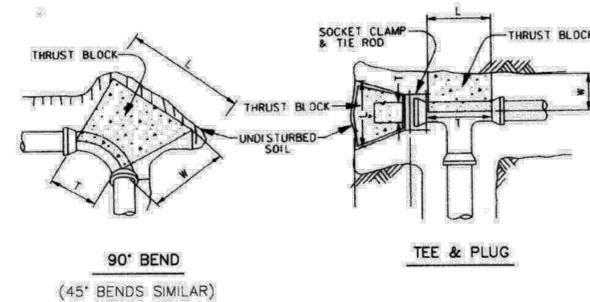
- Minimum separation distance between potable waterline and wastewater main or lateral manhole or cleanout is 9 feet. Where the 9 foot separation distance cannot be achieved, the potable waterline shall be encased in a joint of pipe at least 150 psi pressure class pipe that is centered on the crossing, sealed at both ends with cement grout or manufactured seal, at least 18 feet long, at least 2 nominal sizes larger than proposed water line, and supported by spacers between sewer line and encasement pipe at a maximum of 5 foot intervals.

TCEQ WATER/WASTE WATER CROSSING DETAILS

NOT TO SCALE BASED ON CH. 290.44(e)



- NOTE:
- MATERIALS AND COATINGS TO BE IN ACCORDANCE WITH WATER LINE STANDARD SPECIFICATIONS.
 - RESTRAIN EXISTING PIPING BEYOND STEEL SECTION AS REQUIRED TO PREVENT MOVEMENT.
 - AS PER DESIGN GUIDELINE.

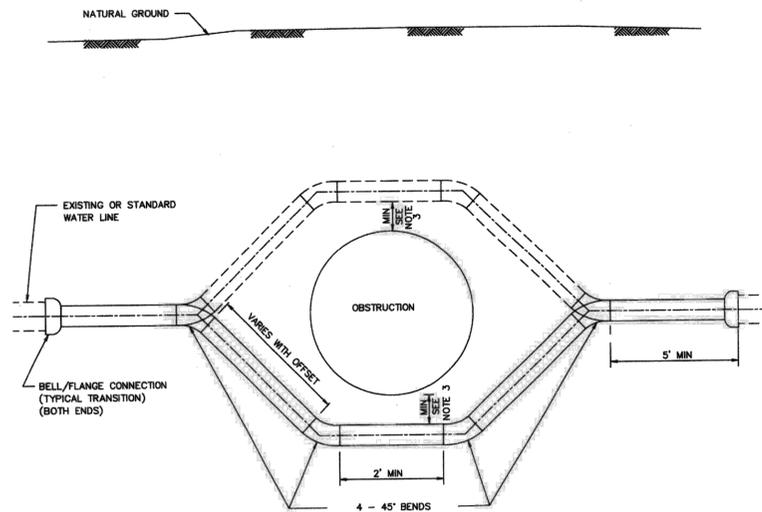


PIPE SIZE	90° BEND			45° BEND			TEE/PLUG				
	W	H	L	W	H	L	W	H	L		
4"	6	12	14	10	6	8	11	8	6	10	12
6"	8	14	26	12	8	14	14	12	8	14	19
8"	10	16	40	16	10	18	20	16	10	18	26
10"	12	24	42	18	12	22	25	18	12	24	30
12"	14	36	40	30	14	26	30	22	14	26	40

CORRECTION FACTORS		
SOIL TYPE	SOIL BEARING STRENGTH S _b (lb/ft ²)	MULTIPLY "L" AND "H" BY
SOFT CLAY	1000	1.73
SILT	1500	1.41
SANDY SILT	3000	1.00
SAND	4000	0.87
SANDY CLAY	6000	0.71
HARD CLAY	9000	0.58

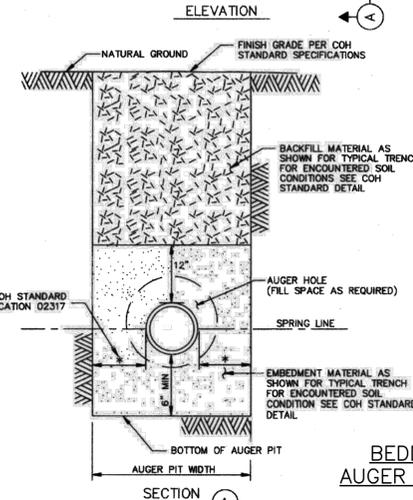
- NOTES:
- DEPTH "W" MAY BE GREATER THAN SPECIFIED TO ALLOW WORKING SPACE.
 - BLOCKING MUST BE PLACED AGAINST UNDISTURBED EARTH. WHERE THIS IS NOT POSSIBLE, THE FILL BETWEEN THE BEARING SURFACE AND UNDISTURBED SOIL MUST BE COMPACTED TO AT LEAST 90% STANDARD PROCTOR DENSITY.
 - PROVIDE CONCRETE IN ACCORDANCE WITH STANDARD SPECIFICATION SECTION 03315 -- CONCRETE FOR UTILITY CONSTRUCTION.
 - BLOCKING DIMENSIONS SHOWN ARE BASED ON 3000 PSI SOIL BEARING STRENGTH AND 125 PSI INTERNAL WATER PRESSURE. FOR OTHER SOIL CONDITIONS, MULTIPLY DIMENSIONS "L" AND "H" BY THE APPROPRIATE CORRECTION FACTOR.

THRUST BLOCK DETAIL FOR WATER LINES (4-INCH TO 12-INCH)



- PIPE OFFSET ALTERNATES
- DUCTILE IRON PIPE PRESSURE 250 PSI WITH APPROVED RESTRAINED JOINTS.
 - PVC PIPE WITH INTEGRAL RESTRAINED JOINT SYSTEM, OR DUCTILE - IRON RESTRAINED JOINT FITTINGS, EPOXY LINED AND COATED, USE 250 PSI AWWA C900 DR 14 FOR PVC RESTRAINED JOINTS.
 - PVC NOT ALLOWED FOR GREATER THAN 20 FT OF COVER OR FOR DIAMETER LARGER THAN 20 IN.
 - USE ONLY DUCTILE IRON AND PVC PRODUCTS LISTED ON OCE DIVISION APPROVED PRODUCTS LIST AND IN ACCORDANCE WITH CITY STANDARD SPECIFICATIONS.

TYPICAL STEEL PIPE OFFSET SECTION FOR WATER LINES



- NOTE:
- SELECT BACKFILL FOR RIGID PAVEMENT; FLEXIBLE BASE MATERIAL FOR ASPHALT PAVEMENT.

BEDDING AND BACKFILL AUGER PIT AND AUGER HOLE

NO.	DATE	REVISIONS



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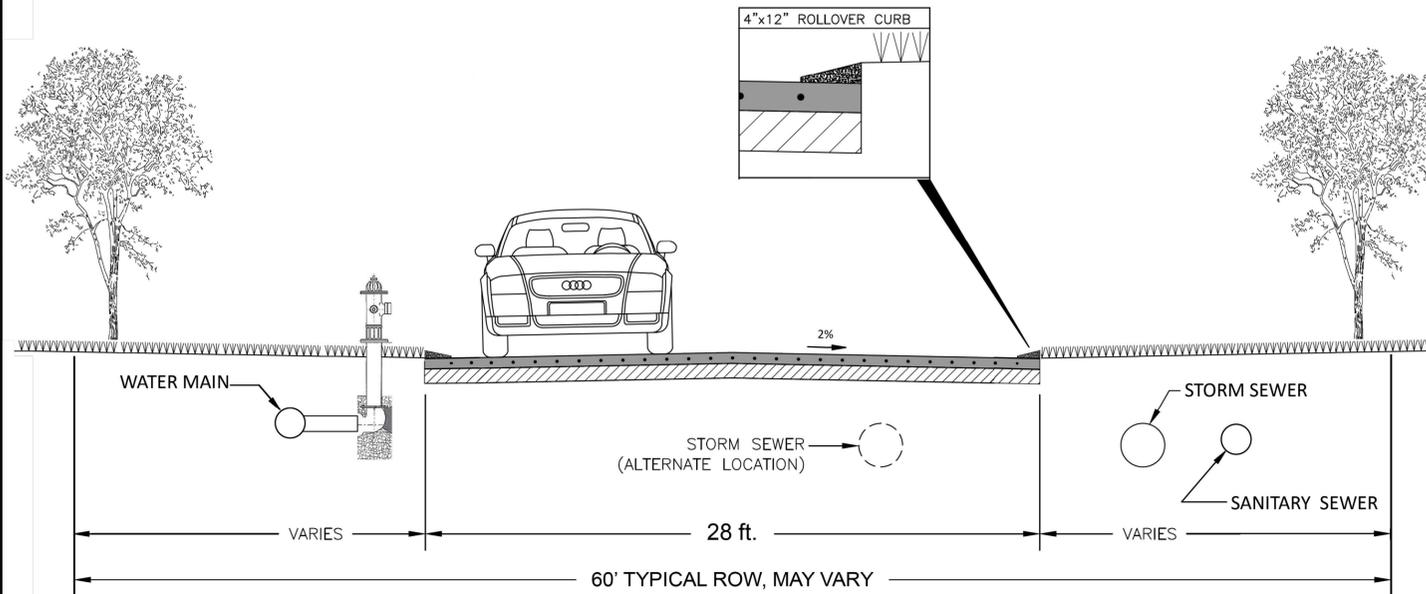
CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

WATER DETAILS (4 OF 4)

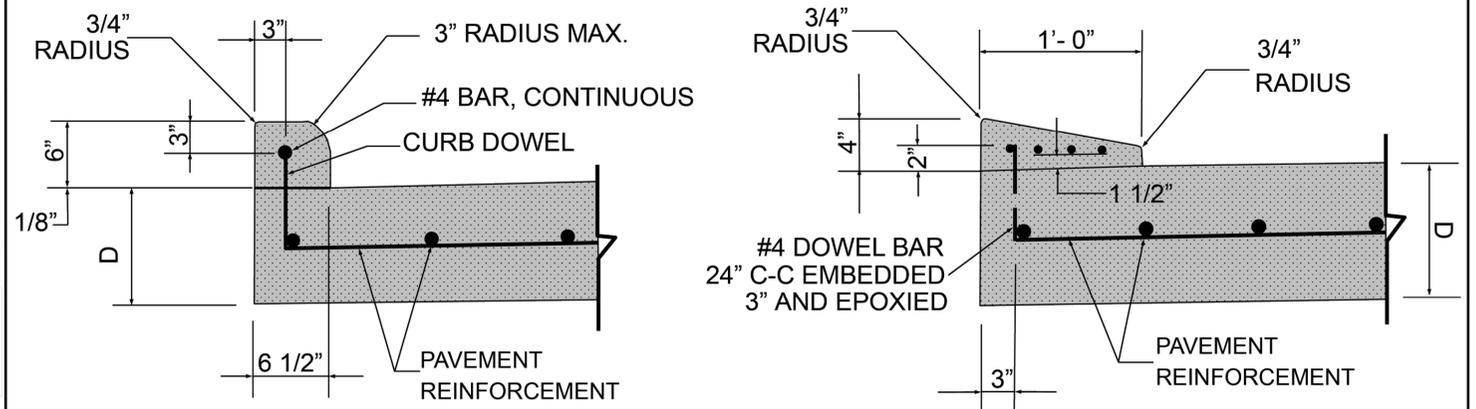
SUBMITTED: 12/04/23	DESIGNED BY: JMS
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DATE: 12/04/23	SHEET No.: 73 OF 101
SURVEY BY: CFA	DWG. No.:
F B No.: -	

NOT TO SCALE



TYPICAL RESIDENTIAL/LOCAL STREET SECTION

DETAIL ST-1



TYPICAL CONCRETE CURB REINFORCING DETAILS

4' X 12' TRANSITION CURB (ROLL OVER)

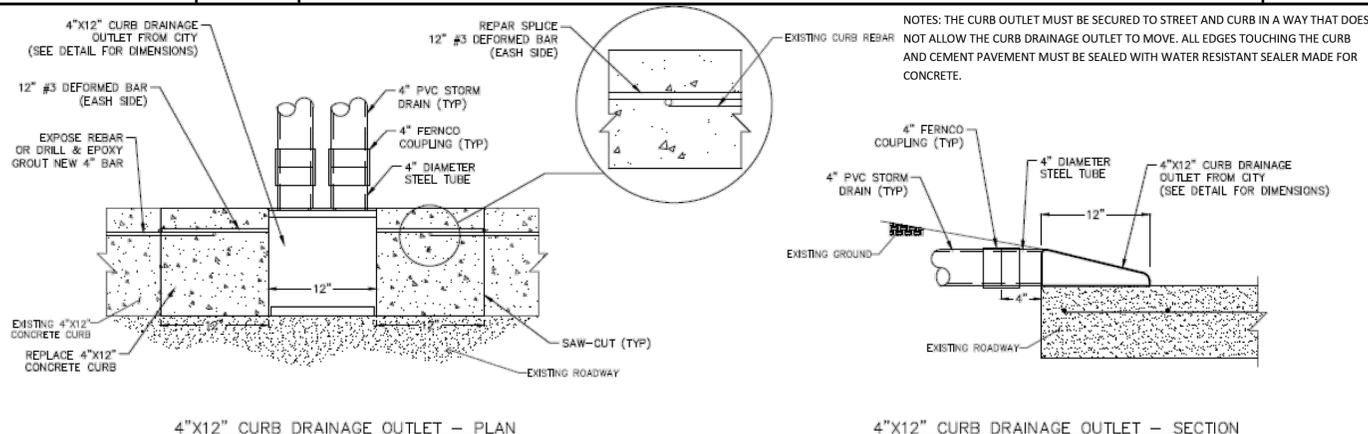
NOTE: D = DESIGNED PAVEMENT DEPTH

NOT TO SCALE

CURB DETAILS

DETAIL ST-2

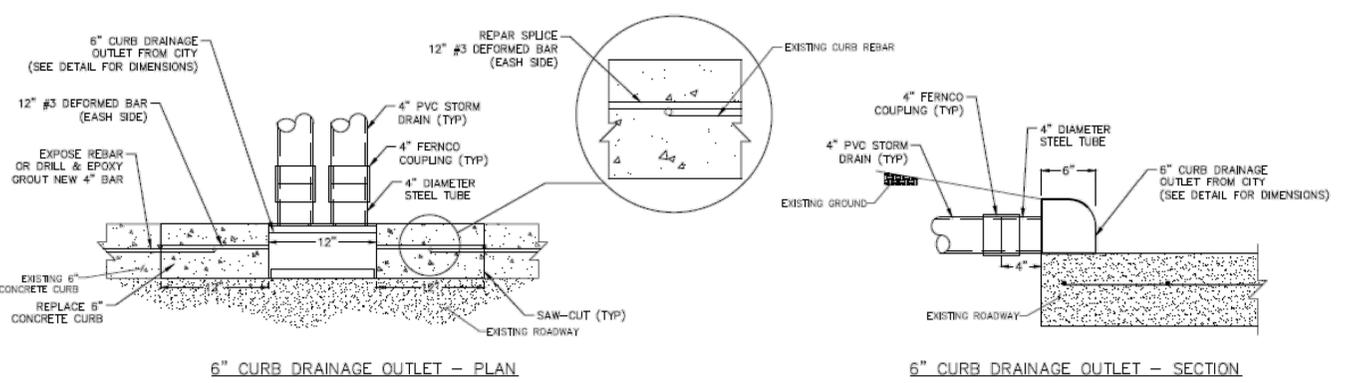
27



4'x12' CURB DRAINAGE OUTLET - PLAN

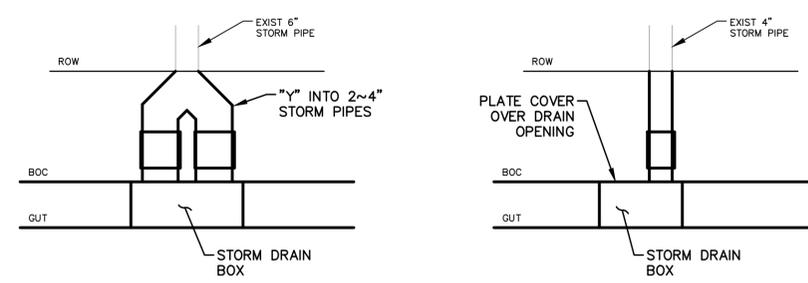
4'x12' CURB DRAINAGE OUTLET - SECTION

NOTES: THE CURB OUTLET MUST BE SECURED TO STREET AND CURB IN A WAY THAT DOES NOT ALLOW THE CURB DRAINAGE OUTLET TO MOVE. ALL EDGES TOUCHING THE CURB AND CEMENT PAVEMENT MUST BE SEALED WITH WATER RESISTANT SEALER MADE FOR CONCRETE.



6' CURB DRAINAGE OUTLET - PLAN

6' CURB DRAINAGE OUTLET - SECTION



CURB DRAIN DETAIL

CURB DRAINAGE OUTLET DETAILS

DETAIL: DRAINAGE-1

30

NO.	DATE	REVISIONS



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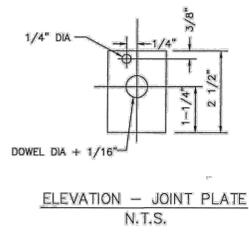
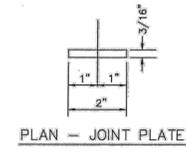
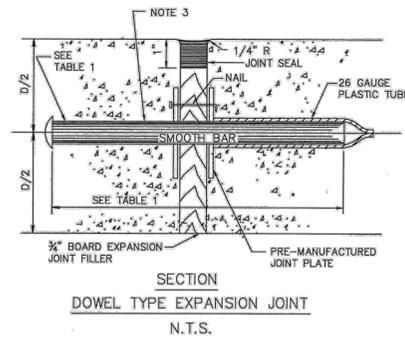
CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

PAVING DETAILS
(1 OF 2)

SUBMITTED: 12/04/23	DESIGNED BY: JMS
SCALE: N/A	DRAWN BY: BMG
DATE: 12/04/23	SHEET No.: 74 OF 101
SURVEY BY: CFA	DWG. No.:
F B No.: -	

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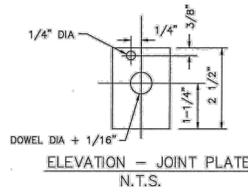
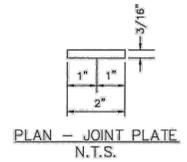
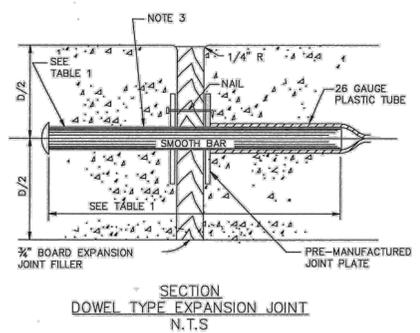
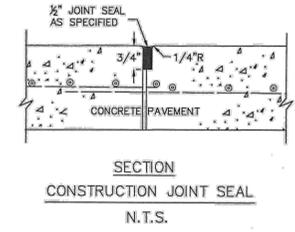
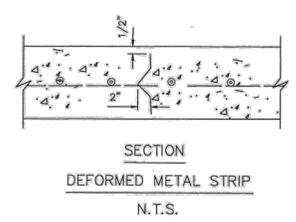


- NOTES:
1. STEEL TO MEET ASTM STANDARD SPECIFICATIONS FOR CONCRETE REINFORCING BARS. UNITS TO BE SPACED ON 12" CENTERS.
 2. EXPANSION JOINT TO BE PLACED AT THE END OF EACH CURB RADIUS.
 3. CENTER DOWEL HORIZONTALLY ON JOINT.
 4. CENTER DOWEL VERTICALLY IN CONCRETE BASE. EXTEND THICKENED CONCRETE AS NEEDED TO MAINTAIN 3" MIN COVER.
 5. CITY OF HOUSTON APPROVED PRODUCTS MAY BE USED AS JOINT PLATE ALTERNATIVE.

TABLE 1

PAVEMENT THICKNESS (IN)	DOWEL SIZES AND SPACINGS		
	DIAMETER (IN)	LENGTH (IN)	SPACING (IN)
6	3/4	18	12
7	1	18	12
8	1	18	12
9	1 1/4	18	12
10	1 1/4	18	12
11	1 1/4	18	12
12	1 1/4	18	12

PAVEMENT EXPANSION AND CONSTRUCTION JOINT DETAILS
NTS



- NOTES:
1. STEEL TO MEET ASTM STANDARD SPECIFICATIONS FOR CONCRETE REINFORCING BARS.
 2. EXPANSION JOINT TO BE PLACED AT THE END OF EACH CURB RADIUS AND SPACED AT A MAXIMUM DISTANCE OF 3 FEET MAXIMUM SPACING FOR CONTROL JOINTS SHALL BE 3 FEET.
 3. CENTER DOWEL HORIZONTALLY ON JOINT.
 4. CENTER DOWEL VERTICALLY IN CONCRETE AS NEEDED TO MAINTAIN A 2 INCH MINIMUM COVER.

SIDEWALK EXPANSION AND CONSTRUCTION JOINT DETAILS
NTS

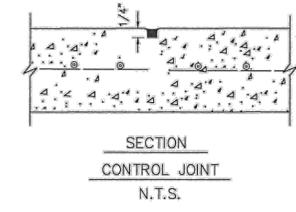
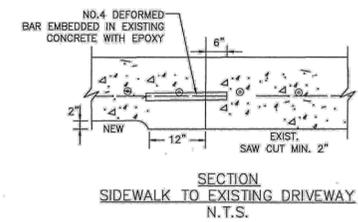
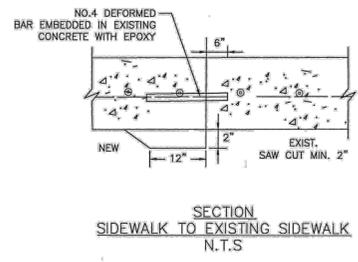


TABLE 1

PAVEMENT THICKNESS (IN)	DOWEL SIZES AND SPACINGS		
	DIAMETER (IN)	LENGTH (IN)	SPACING (IN)
4 1/2	1/2	18	12
5	1/2	18	12
6	3/4	18	12
7	1	18	12

NO.	DATE	REVISIONS



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CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

PAVING DETAILS
(2 OF 2)

SUBMITTED: 12/04/23	DESIGNED BY: JMS
SCALE: N/A	DRAWN BY: AA
DATE: 12/04/23	SHEET No.: 75 OF 101
SURVEY BY: CFA	DWG. No.:
F B No.: -	

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GENERAL NOTES

- THE EXISTING SIGNS LOCATED ON PUBLIC CONSTRUCTION SITE ARE THE PROPERTY OF THE CITY OF HOUSTON. THROUGHOUT THE PERIOD OF THE CONTRACT, THE CONTRACTOR SHALL PROTECT THESE SIGNS SUCH THAT THEY ARE NOT DAMAGED IN THE COURSE OF CONSTRUCTION ACTIVITY. SUCH PROTECTION SHALL INCLUDE THE PERIOD AFTER SIGNS ARE REMOVED FROM INSTALLATION AND STORED BY THE CONTRACTOR OR DELIVERED TO THE TRAFFIC OPERATIONS CENTER (2200 PATTERSON). THE GENERAL TRAFFIC SUPERINTENDENT (832-395-6728/6756) MUST BE NOTIFIED 48 HOURS IN ADVANCE PRIOR TO DELIVERY.
- AFTER SIGNS ARE REMOVED FROM INSTALLATION AND ARE BEING STORED BY THE CONTRACTOR, THE CONTRACTOR SHALL CONTACT THE TRAFFIC OPERATIONS DIVISION OF THE PUBLIC WORKS AND ENGINEERING DEPARTMENT (832-395-6728/6756) AND ARRANGE FOR A CONVENIENT TIME TO DELIVER ONLY CITY SIGNS AND POSTS IDENTIFIED BY TRAFFIC OPERATIONS DIVISION TO 2200 PATTERSON.
- PRIOR TO THE START OF CONSTRUCTION, ALL EXISTING SIGNS WITHIN THE AREA OF CONSTRUCTION WILL BE INVENTORIED AND DOCUMENTED JOINTLY BY THE CITY INSPECTOR AND THE CONTRACTOR. THIS DOCUMENT WILL BE JOINTLY SIGNED BY BOTH PARTIES REFLECTING THE SIGN TYPE, SIGN SIZE, SIGN CONDITION, SIGN LOCATION, REFLECTIVITY ADEQUACY, ETC. THE CONTRACTOR IS HELD ACCOUNTABLE FOR THESE SIGNS THROUGHOUT THE PROJECT AND AT THE PROJECTS COMPLETION.
- ALL GROUND MOUNTED STOP SIGNS, WARNING SIGNS, AND OTHER REGULATORY SIGNS SHALL USE AT A MINIMUM HIGH INTENSITY PRISMATIC REFLECTIVE SHEETING.
- ALL OVERHEAD SIGNS SHALL USE DIAMOND GRADE REFLECTIVE SHEETING.
- ALL OTHER SIGNS SHALL USE SUPER ENGINEER GRADE SHEETING.
- ALL BLANKS TO BE INSTALLED SHALL BE OF THE 3000, 5000 OR 6000 SERIES ALUMINUM WITH A YIELD STRENGTH OF 3003-H14 ALLOY.
- "T" DENOTES THICKNESS OF SIGN BLANKS.
- ALL HOLES SHALL BE 3/8" DIAMETER DRILLED OR PUNCHED AS SHOWN ON EACH BLANK DETAIL AND SHALL BE FREE OF BURRS AND / OR ROUGH EDGES.
- SIGN BLANK CORNERS TO BE ROUNDED AS SHOWN ON EACH DETAIL ON SHEET 01509-03.
- ALL SIGN BLANK ARE TO BE ETCHED, DEGREASED, AND HAVE AN ALDINE FINISH PRIOR TO APPLICATION OF LEGENDS.
- ALL DETAILS ARE NOT TO SCALE.
- ALL SIGNS SHALL BE MANUFACTURED AND INSTALLED IN CONFORMANCE TO THE LATEST TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND STANDARD HIGHWAY SIGNS LATEST EDITION.
- REINSTALLATION OF PREVIOUSLY EXISTING SIGNS, WHERE REQUIRED PER PLANS, SHALL BE AT THE CONTRACTOR'S EXPENSE.

TYPICAL GROUND SIGN INSTALLATION PERFORATED SQUARE METAL TUBING

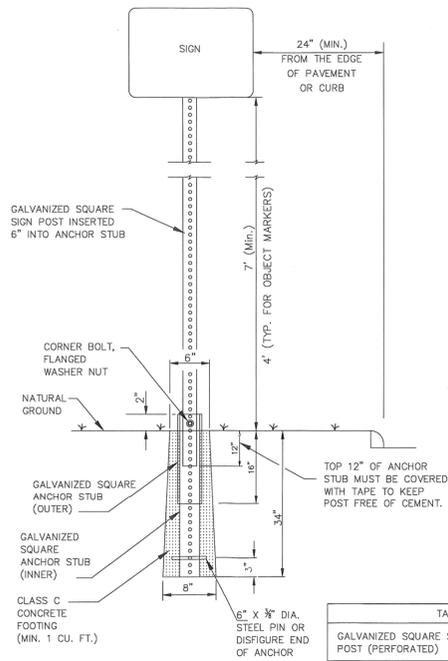


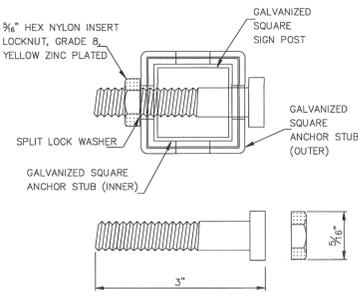
TABLE A

GALVANIZED SQUARE SIGN POST (PERFORATED)	1-3/4" x 1-3/4" (14 GAUGE)
GALVANIZED SQUARE ANCHOR STUB (PERFORATED) (INNER)	2" x 2" x 36" (14 GAUGE)
GALVANIZED SQUARE ANCHOR STUB (PERFORATED) (OUTER)	2 1/4" x 2 1/4" x 18" (14 GAUGE)

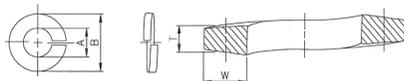
NOMINAL WASHER SIZE	A	B	T	W
3/16"	0.322	0.314	0.503	0.078
	0.314	0.303	0.478	0.125

DIMENSIONS: ASME B18.21.1
 MATERIAL: ALLOY STEEL PER ASME B18.211
 FINISH: MECHANICAL ZINC PER ASME B695, CLASS 5, TYPE 2 (YELLOW)

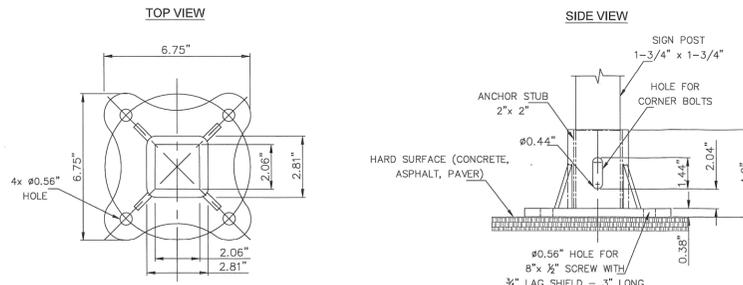
CORNER BOLT



3/16" SPLIT LOCK WASHER, HIGH ALLOY MECHANICAL DEPOSITED YELLOW SINK

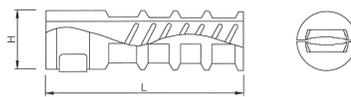


TYPICAL HARD SURFACE INSTALLATION GALVANIZED SIGN BASE



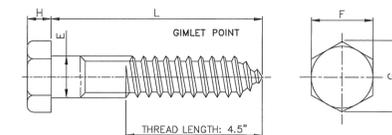
- NOTES:**
- MATERIAL: ASTM A-536 GRADE 65-45-12 DUCTILE IRON
 - HOT DIP GALVANIZE PER ASTM A-153
 - ALL DIMENSIONS ARE IN INCHES

ANCHOR LAG SHIELD - ZINC ALLOY



LAG THREAD SIZE	L	H
1/2"	2"	3"
	3"	3/4"

8" HEX LAG SCREWS, HOT DIPPED GALVANIZED



DIAMETER	E	F	G	H	L
1/2"	0.515	0.482	0.750	0.725	0.866
	0.482	0.750	0.725	0.866	0.826
				0.564	0.302

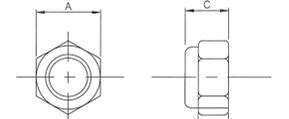
MATERIAL: PER A307 GRADE A
 COATING: HOT DIP ZINC PER ASTM F2329 OR IN ACCORDANCE WITH CLASS C OF ASTM A153 AND CLASS D FOR 3/8" DIAMETER AND LESS

1/2" FLAT WASHERS, LOW CARBON, SAE, ZINC PLATED

SIZE	TOLERANCE			OD			THICKNESS-TH		
	BASIC	PLUS	MINUS	BASIC	PLUS	MINUS	BASIC	PLUS	MINUS
1/2"	0.515	0.015	0.005	1.062	0.030	0.007	0.095	0.121	0.074

DIMENSIONS: ASME B18.21.1, TYPE A PLAIN WASHERS
 MATERIAL: CARBON STEEL
 FINISH: Fe/Zn 3AT PER ASTM F1941

HEX NYLON INSERT LOCKNUTS (NE), GRADE 8, YELLOW ZINC PLATED



SIZE	C		A		D
	THICKNESS	WIDTH ACROSS FLATS	MAX	MIN	MIN
1/2"	0.359	0.329	0.489	0.489	0.250

DIMENSIONS: ASME B18.16.6
 MATERIAL: CARBON STEEL, GRADE 8 PER ASME B18.16.6, NYLON 6
 THREAD REQUIREMENTS: ASME B1.1 UNC& UNF CLASS 2B

GENERAL NOTES AND GROUND MOUNTING SIGN

POST MOUNTED STREET NAME SIGN W/ NO OUTLET SIGN



D3 - POST MOUNTED STREET NAME SIGN

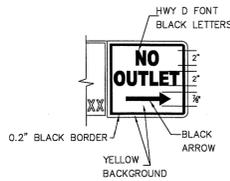


OVERHEAD STREET NAME SIGN DETAIL

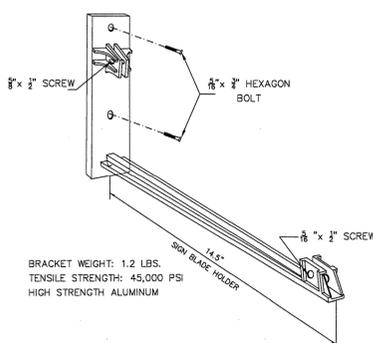


D3 - STREET NAME SIGN

	POST-MOUNTED SIGN	OVERHEAD SIGN
HEIGHT	9"	24"
LENGTH	30" MIN. 48" MAX. 6" INCREMENTS OF LENGTH	10" MAX. 2" INCREMENT OF LENGTH
THICKNESS	0.125"	0.080"
SUBSTRATE	ALUMINUM ALLOY, 5052-H38 (ASTM B-209)	
SIGN FACE MATERIALS	GREEN FILM OVER DIAMOND GRADE VIP SHEETING	
LEGENDS AND SYMBOLS	HIGHWAY GOTHIC SERIES D (USUAL) HIGHWAY GOTHIC SERIES C OR B FOR MAXIMUM LENGTH SIGN BLANK	
COLOR	LETTERS-BLACK REFLECTIVE BORDER-BLACK REFLECTIVE BACKGROUND-WHITE REFLECTIVE	



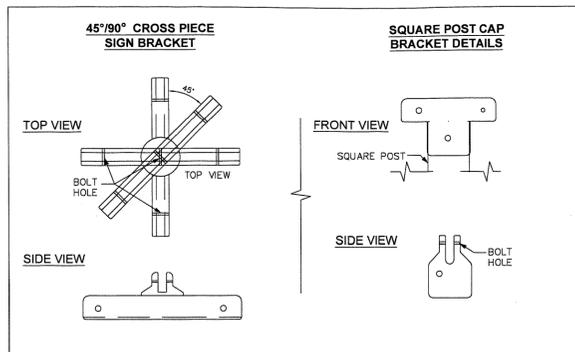
SIGNAL POLE MOUNTING DETAIL



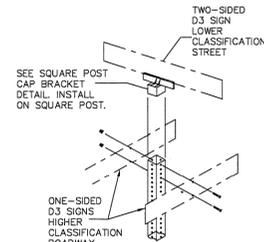
NOTES:

- TYPICAL SIGN PLATE SHOULD BE 30" MAX.
- LONGER SIGN PLATE MUST BE APPROVED BY THE CITY TRAFFIC ENGINEER.

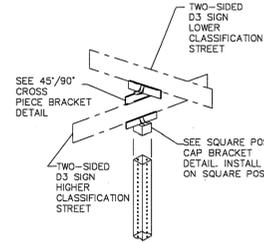
STREET NAME SIGN AND SIGN MOUNTING



D3 SIGNS GREATER THAN 42" PLATES IN LENGTH



D3 SIGNS LESS THAN OR EQUAL TO 42" PLATES IN LENGTH



SIGN BASE MOUNTING DETAILS

NO.	DATE	REVISIONS



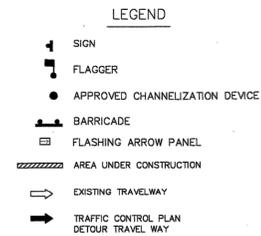
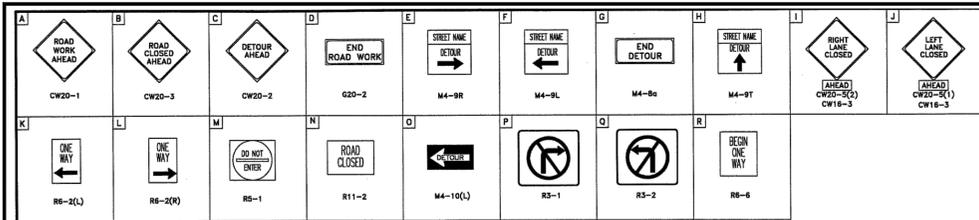
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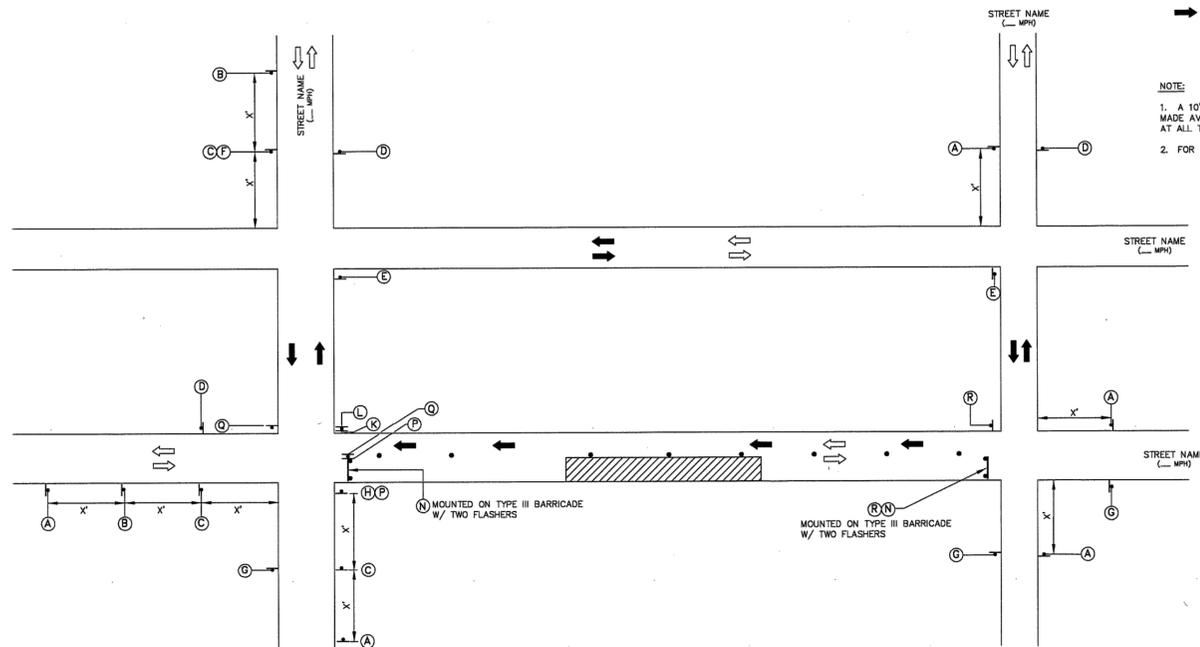
BRIGHTON PLACE RECONSTRUCTION

TRAFFIC DETAILS
 (1 OF 4)

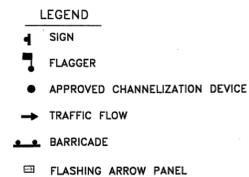
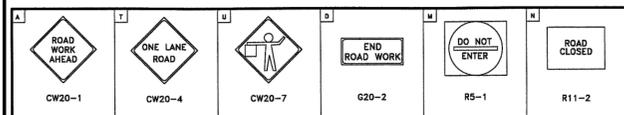
SUBMITTED: 12/04/23	DESIGNED BY: JMS
SCALE: N/A	DRAWN BY: AA
DATE: 12/04/23	SHEET No.: 76 OF 101
SURVEY BY: CFA	DWG. No:
F B No.: -	



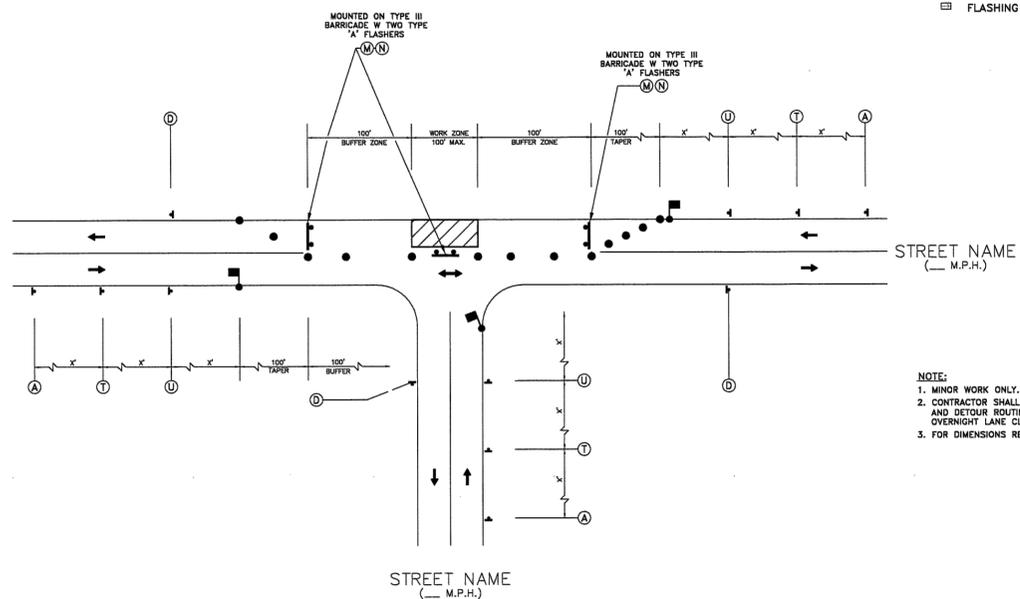
NOTE:
 1. A 10' MINIMUM LANE WIDTH FOR EMERGENCY SHALL BE MADE AVAILABLE AND MAINTAINED BY THE CONTRACTOR AT ALL TIMES.
 2. FOR DIMENSIONS REFER TO SHEET 01512-01.



TCP ONE LANE CLOSURE



NOTE:
 1. MINOR WORK ONLY.
 2. CONTRACTOR SHALL USE ONE-LANE ROAD CLOSURE AND DETOUR ROUTING FOR MAJOR OPERATIONS AND OVERNIGHT LANE CLOSURES.
 3. FOR DIMENSIONS REFER TO SHEET 01512-01



PHASE 1 OF 3
 TYPICAL CONSTRUCTION ZONE
 AT A T-INTERSECTION

NO.	DATE	REVISIONS



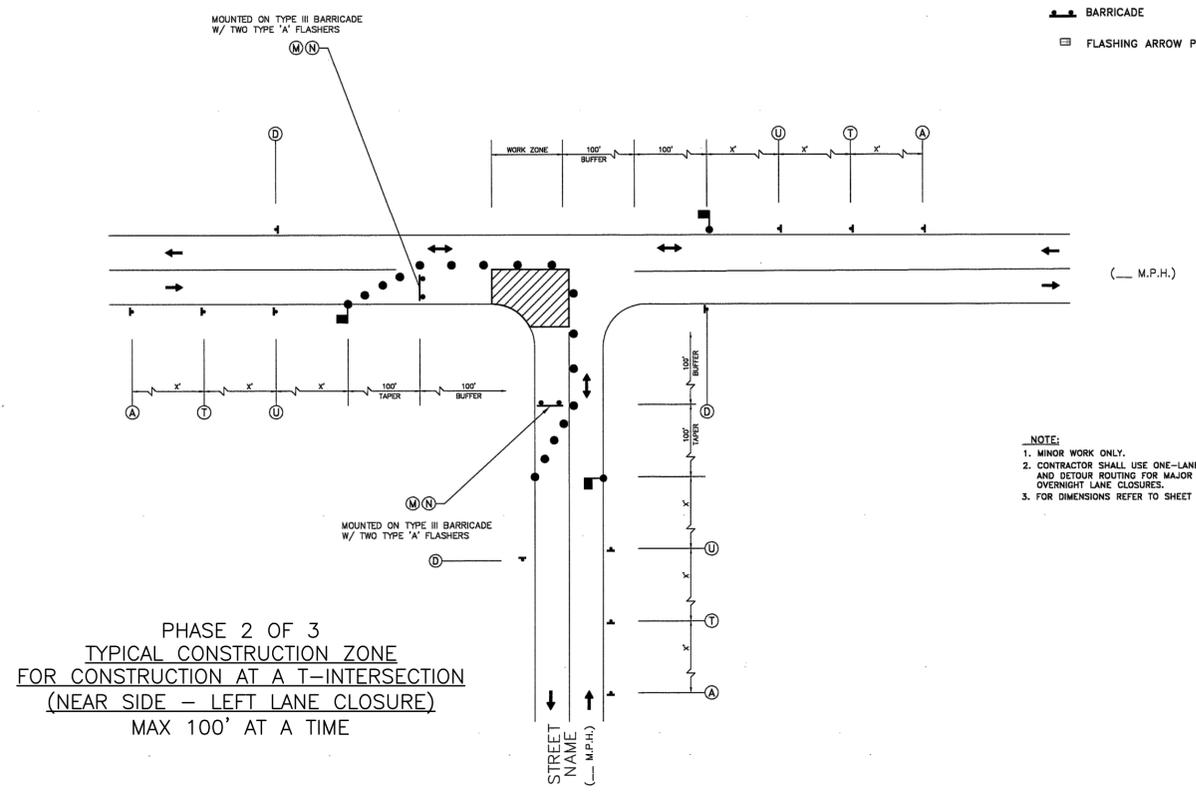
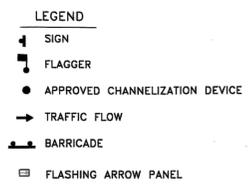
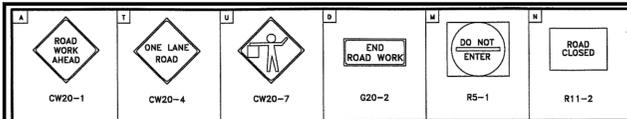
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CITY OF SPRING VALLEY VILLAGE

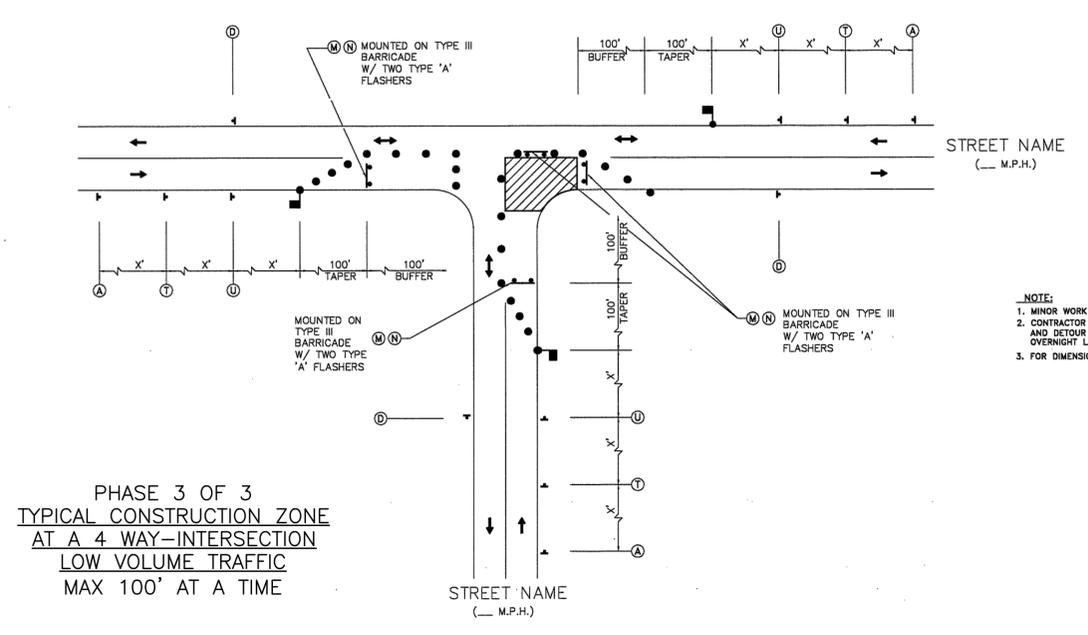
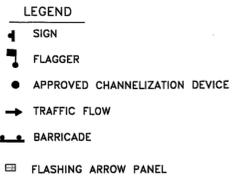
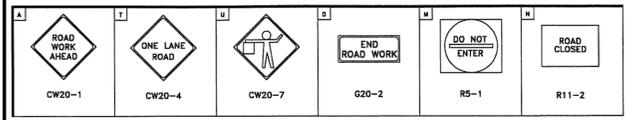
BRIGHTON PLACE RECONSTRUCTION

TRAFFIC DETAILS
 (2 OF 4)

SUBMITTED: 12/04/23	DESIGNED BY: JMS
SCALE: N/A	DRAWN BY: AA
DATE: 12/04/23	SHEET No.: 77 OF 101
SURVEY BY: CFA	DWG. No:
F B No.: -	



NOTE:
 1. MINOR WORK ONLY.
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 3. FOR DIMENSIONS REFER TO SHEET 01512-01



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 3. FOR DIMENSIONS REFER TO SHEET 01512-01

NO.	DATE	REVISIONS



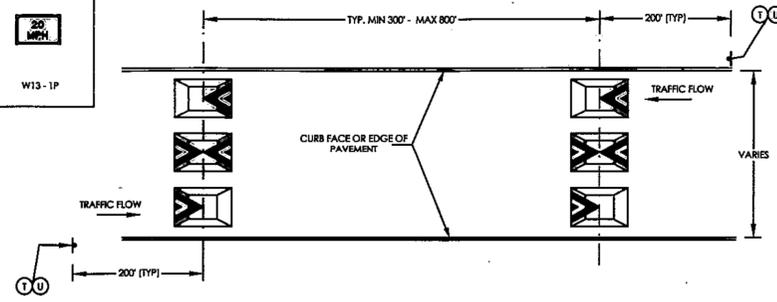
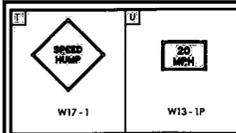
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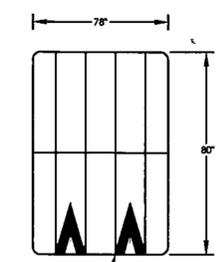
BRIGHTON PLACE RECONSTRUCTION

TRAFFIC DETAILS
(3 OF 4)

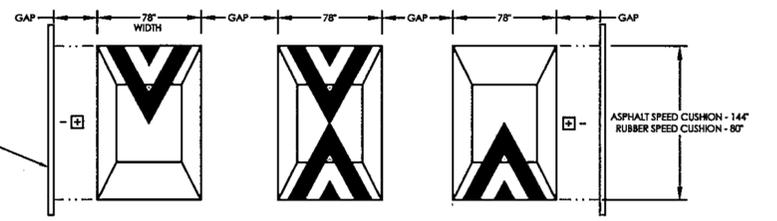
SUBMITTED: 12/04/23	DESIGNED BY: JMS
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F B No.: -	



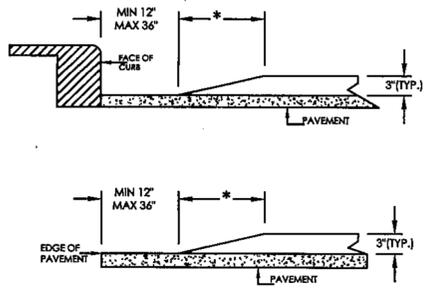
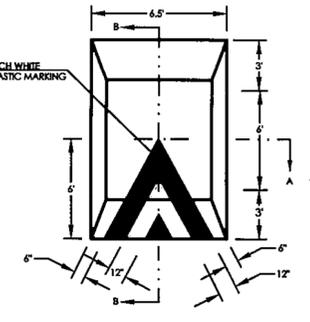
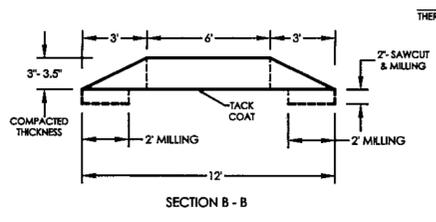
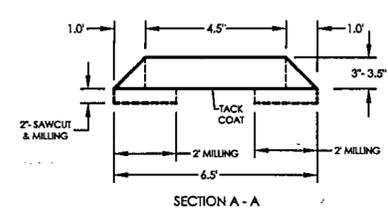
RUBBER SPEED CUSHION



SEE SECTION 13500 FOR MATERIAL AND PRODUCT SPECIFICATIONS
INSTALL PER MANUFACTURER'S SPECIFICATIONS



ASPHALT SPEED CUSHION - INSTALLATION DETAILS



* RUBBER CUSHION - 12' TAPER, ASPHALT CUSHION - 12' TAPER.

GENERAL NOTES

1. SPEED CUSHIONS AND ASSOCIATED SIGNS AND PAVEMENT MARKINGS WILL BE CONSTRUCTED AT LOCATIONS DESIGNED BY TRAFFIC OPERATIONS DIVISION (TOD) OR PER PLANS APPROVED BY TOD.
2. CONTRACTOR SHALL CONTACT THE CONSTRUCTION COORDINATOR BEFORE ANY STREET IS TEMPORARILY CLOSED FOR CONSTRUCTION.
3. THE TYPE OF SPEED CUSHION AND DISTANCE BETWEEN EACH CUSHION WILL BE DETERMINED BY TOD.
4. NO PART OF A SPEED CUSHION SHALL BE LOCATED IN FRONT OF DRIVEWAY APPROACH; RATHER THERE SHOULD BE A MINIMUM OF 6 FEET FROM THE EDGE OF A DRIVEWAY, WHEN PRACTICAL.
5. SPEED CUSHIONS SHOULD BE PLACED AS CLOSE AS POSSIBLE TO THE PROPERTY LINES INSTEAD OF MID-LOT LOCATION, WHERE PRACTICAL.
6. SPEED CUSHIONS SHOULD BE INSTALLED AT A RIGHT ANGLE TO THE CENTERLINE TANGENT OF THE ROADWAY.
7. TRAFFIC CONTROL CONSISTING OF SIGNS SHALL BE PROVIDED TO ADVISE ROADWAY USER OF SPEED CUSHIONS PRESENT. TRAFFIC SIGNS AND PAVEMENT MARKINGS SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD).
8. ALL SIGNS AND PAVEMENT MARKINGS WILL BE PROVIDED AND INSTALLED BY THE CONTRACTOR.
9. CONTRACTOR SHALL NOT OPEN SPEED CUSHIONS TO TRAFFIC UNTIL ALL REQUIRED WARNING SIGNS AND PAVEMENT MARKINGS ARE COMPLETED.
10. CONTRACTOR WILL MAINTAIN TEMPORARY MARKINGS UNTIL PERMANENT MARKINGS ARE INSTALLED.
11. CONTRACTOR SHALL COMPLETE THE CUSHION INSTALLATION TO FORM ONE COMPLETE HUMP BEFORE LEAVING THE JOB SITE.
12. CONTRACTOR SHALL WORK ONE HALF OF THE STREET AT A TIME AND MAINTAIN TWO-WAY TRAFFIC WITH CERTIFIED FLAGGER.
13. ASPHALT SPEED CUSHION SHALL BE CONSTRUCTED WITH TYPE D ASPHALT MIX PER CITY OF HOUSTON SPECIFICATIONS; A TACK COAT SHALL BE APPLIED PRIOR TO APPLICATION OF PAVEMENT MATERIAL.
14. ASPHALT SPEED CUSHIONS SHALL BE COMPACTED PER CITY OF HOUSTON SPECIFICATIONS AND SHAPE ACCORDING TO INSTALLATION DETAILS. COMPACTION SHALL REQUIRE UTILIZATION OF ALL NECESSARY SIZES AND TYPES OF ROLLERS TO ACCOMPLISH PROPER COMPACTION AND SHAPE.
15. ASPHALT SPEED CUSHIONS ARE TO BE CONSTRUCTED BETWEEN 3" - 3 1/2" IN HEIGHT.
16. CONTRACTOR SHALL NOTIFY GARY DRABEK (832-395-2997) A MINIMUM OF TWO BUSINESS DAYS IN ADVANCE OF THE INSTALLATION OF SPEED CUSHIONS.

TYPICAL SPEED CUSHIONS ARRANGEMENT FOR A GIVEN PAVEMENT WIDTH

PAVEMENT WIDTH (FT)	No OF CUSHIONS	GAP (IN)	CUSHION (IN)	GAP (IN)								
16	2	12	78	12	78	12						
18	2	20	78	20	78	20						
20	2	30	78	24	78	30						
22	2	36	78	36	78	36						
24	3	15	78	12	78	12	78	15				
26	3	20	78	19	78	19	78	20				
28	3	27	78	24	78	24	78	27				
30	3	31	78	32	78	32	78	31				
32	4	18	78	12	78	12	78	12	78	18		
34	4	21	78	18	78	18	78	18	78	21		
36	4	24	78	24	78	24	78	24	78	24		
38	4	30	78	28	78	28	78	28	78	30		
40	4	33	78	34	78	34	78	34	78	33		
42	5	19	78	19	78	19	78	19	78	19	78	19
44	5	23	78	23	78	23	78	23	78	23	78	23

SPEED CUSHIONS ARRANGEMENT AND INSTALLATION

NO.	DATE	REVISIONS



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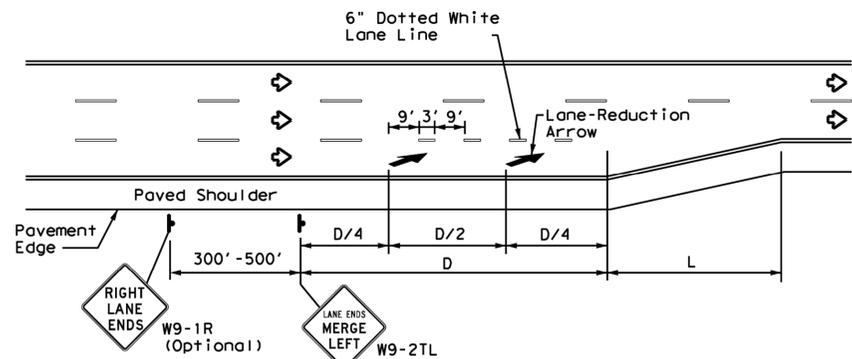
CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

TRAFFIC DETAILS (4 OF 4)

SUBMITTED: 12/04/23	DESIGNED BY: JMS
SCALE: N/A	DRAWN BY: AA
DATE: 12/04/23	SHEET No.: 79 OF 101
SURVEY BY: CFA	DWG. No.:
F B No.: -	

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LANE REDUCTION

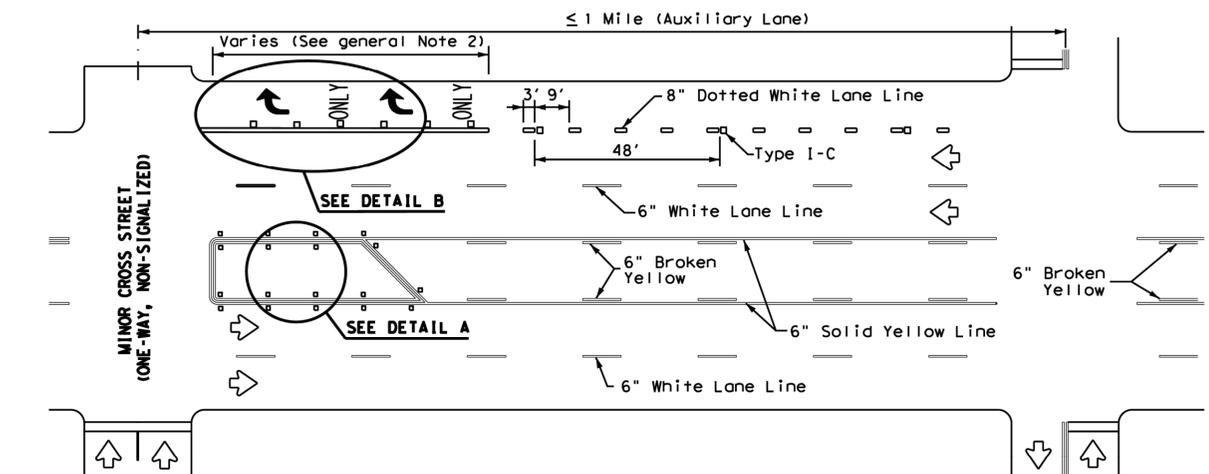
NOTES

1. Lane reduction pavement markings are used where the number of through lanes is reduced because of narrowing of the roadway or because of a section of on-street parking in what would otherwise be a through lane. For Texas Super 2 Passing Lanes, see TS2(PL) standard sheets.
2. On divided highways, an additional RIGHT LANE ENDS (W9-1R) sign may be installed in the median aligned with the W9-1R sign on the right side of the highway.
3. Lane reduction arrows are required for speeds of 45 mph or greater. An optional third lane reduction arrow may be added based on engineering judgement. If used, the optional third lane reduction arrow should be centered between the first and last lane reduction arrows.
4. For lane reductions on Freeways and Expressways, signing shall conform to the TxDOT Freeway Signing Handbook.

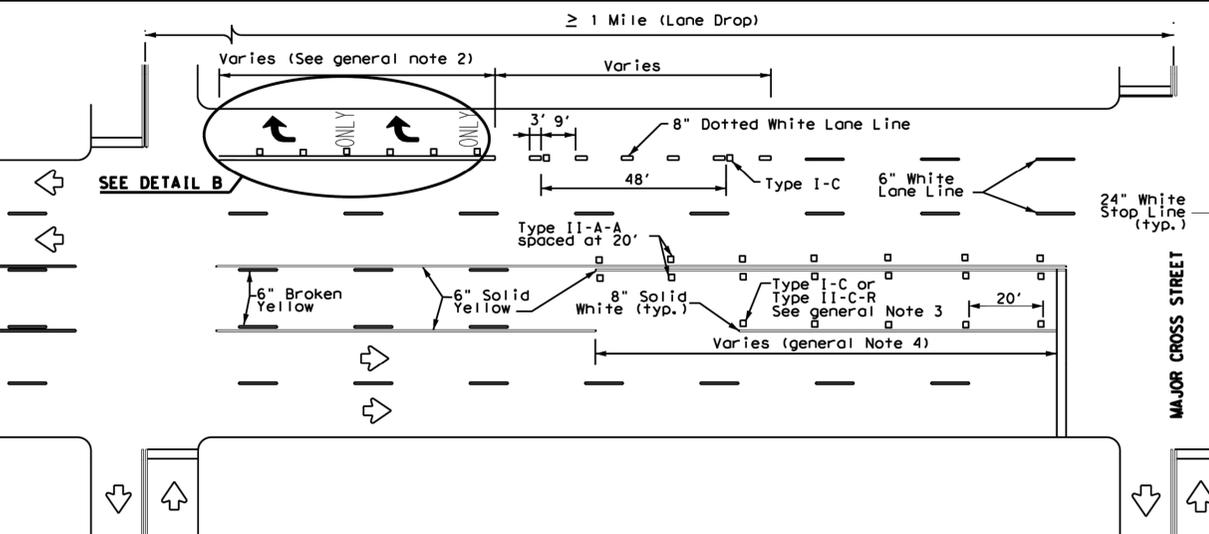
Posted Speed	D (ft)	L (ft)
30 MPH	460	L = $\frac{WS^2}{60}$
35 MPH	565	
40 MPH	670	
45 MPH	775	L = WS
50 MPH	885	
55 MPH	990	
60 MPH	1,100	
65 MPH	1,200	
70 MPH	1,250	
75 MPH	1,350	

GENERAL NOTES

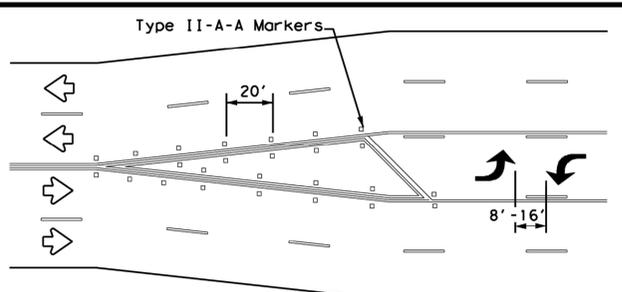
1. Lane use word and arrow markings shall be used where through lanes approaching an intersection become mandatory turn lanes. Lane use word and arrow markings should be used in auxiliary lanes of substantial length. Lane use arrow markings or word and arrow markings may be used in other lanes and turn bays for emphasis. Details for words and arrows are as shown in the Standard Highway Sign Designs for Texas.
2. When lane-use words and arrow markings are used, two sets of arrows should be used if the length of the bay is greater than 180 feet. When a single lane use arrow or word and arrow marking is used for a short turn lane, it should be located at or near the upstream end of the full-width turn lane.
3. Use raised pavement marker Type I-C with undivided highways, flush medians and two way left turn lanes. Use raised pavement marker Type II-C-R with divided highways and raised medians.
4. Length of turn bays, including taper, deceleration, and storage lengths shall be as shown on the plans or as directed by the Engineer. See Chapter 3 of the Roadway Design Manual for additional information on turning lanes or storage lengths.



TYPICAL TWLTL AT ONE-WAY STREET AND RIGHT TURN AUXILIARY LANE

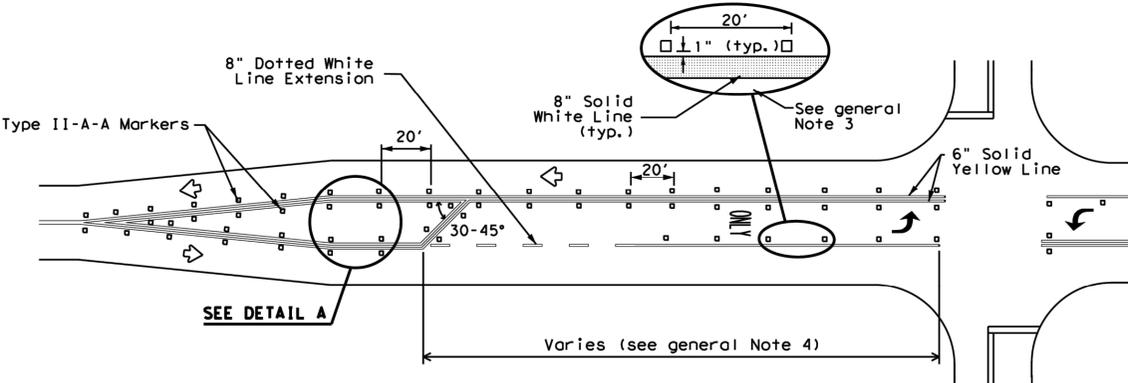


TYPICAL TWLTL AT TWO-WAY CROSS STREET AND RIGHT TURN LANE DROP

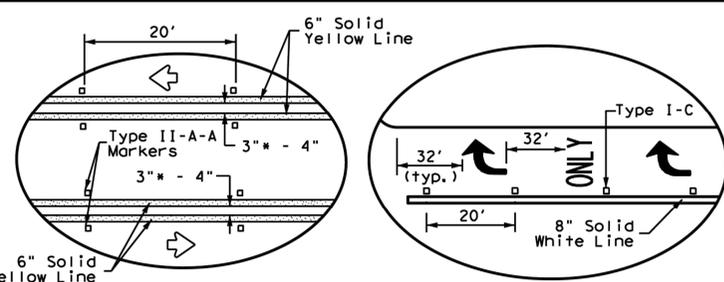


A two-way left-turn (TWLT) lane-use arrow pavement marking should be used at or just downstream from the beginning of a two-way left-turn lane within a corridor. Repeating the marking after each intersection or dedicated turn bay is not required unless stated elsewhere in the plans.

TYPICAL TRANSITION FOR TWLTL AND DIVIDED HIGHWAY



TYPICAL TWO-LANE ROADWAY INTERSECTION WITH LEFT TURN BAYS



DETAIL A

DETAIL B

* 2" minimum allowed for restripe projects when approved by the Engineer.

MATERIAL SPECIFICATIONS	
PAVEMENT MARKERS (REFLECTORIZED)	DMS-4200
EPOXY AND ADHESIVES	DMS-6100
BITUMINOUS ADHESIVE FOR PAVEMENT MARKERS	DMS-6130
TRAFFIC PAINT	DMS-8200
HOT APPLIED THERMOPLASTIC	DMS-8220
PERMANENT PREFABRICATED PAVEMENT MARKINGS	DMS-8240

All pavement marking materials shall meet the required Departmental Material Specifications as specified by the plans.

Texas Department of Transportation
Traffic Safety Division Standard

TWO-WAY LEFT TURN LANES, RURAL LEFT TURN BAYS, AND LANE REDUCTION PAVEMENT MARKINGS PM(3) - 22

FILE: pm3-22.dgn	DN:	CK:	DW:	CK:
© TxDOT December 2022	CONT	SECT	JOB	HIGHWAY
4-98 3-03 6-20	DIST	COUNTY	SHEET NO.	
5-00 2-10 12-22				
8-00 2-12				

NO.	DATE	REVISIONS



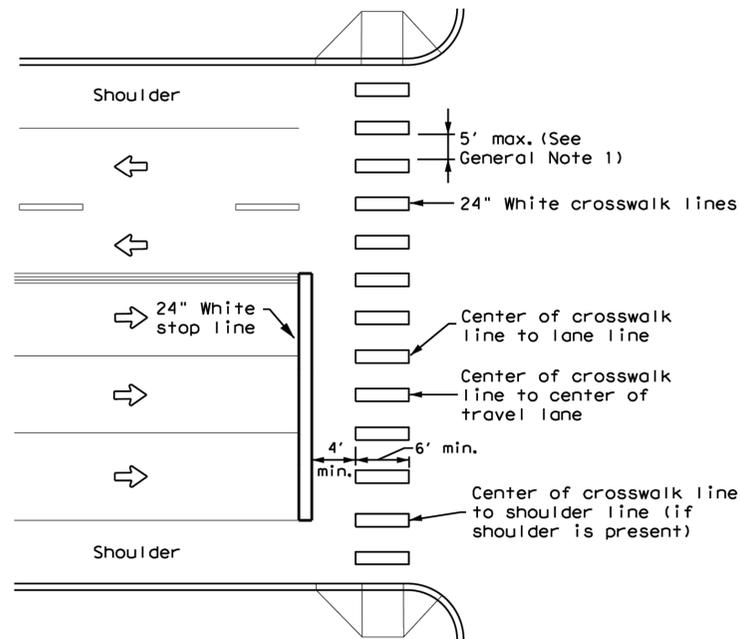
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CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

TWO-WAY LEFT TURN LANES, RURAL LEFT TURN BAYS, AND LANE REDUCTION PAVEMENT MARKINGS

SUBMITTED: 12/04/23	DESIGNED BY: JMS
SCALE: N/A	DRAWN BY: AA
DATE: 12/04/23	SHEET No.: 81 OF 101
SURVEY BY: CFA	DWG. No.:
F B No.: -	



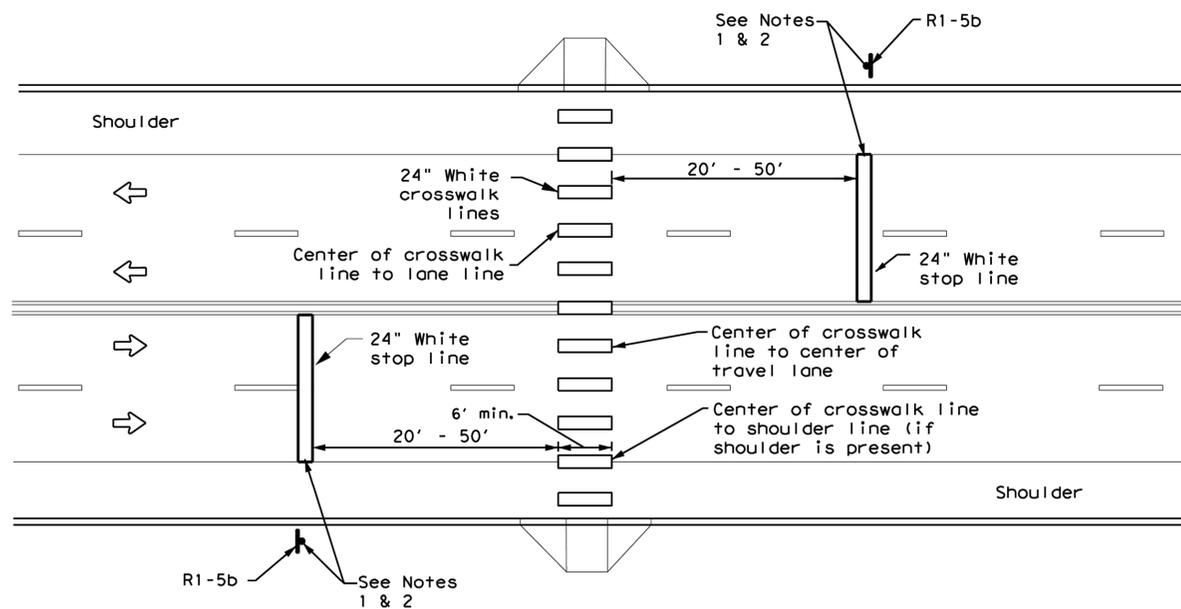
HIGH-VISIBILITY LONGITUDINAL CROSSWALK AT CONTROLLED APPROACH

GENERAL NOTES

1. Longitudinal crosswalk lines should not be placed in the wheel path of vehicles. Center the crosswalk lines on travel lanes, lane lines, and shoulder lines (if present).
2. A minimum 6" clear distance shall be provided to the curb face. If the last crosswalk line falls into this distance it must be omitted.
3. For divided roadways, adjustments in spacing of the crosswalk lines should be made in the median so that the crosswalk lines are maintained in their proper location across the travel portion of the roadway.
4. At skewed crosswalks, the crosswalk lines are to remain parallel to the lane lines.
5. Each crosswalk shall be a minimum of 6' wide.
6. The High-Visibility Longitudinal Crosswalk is the preferred crosswalk pattern on State Highways. Other crosswalk patterns as shown in the "Texas Manual on Uniform Traffic Control Devices" may be used. All crosswalk designs and dimension shall comply with the "Texas Manual on Uniform Traffic Control Devices."
7. Final placement of Stop Bar and Crosswalk shall be approved by the Engineer in the field.

MATERIAL SPECIFICATIONS	
PAVEMENT MARKERS (REFLECTORIZED)	DMS-4200
EPOXY AND ADHESIVES	DMS-6100
BITUMINOUS ADHESIVE FOR PAVEMENT MARKERS	DMS-6130
TRAFFIC PAINT	DMS-8200
HOT APPLIED THERMOPLASTIC	DMS-8220
PERMANENT PREFABRICATED PAVEMENT MARKINGS	DMS-8240

All pavement marking materials shall meet the required Departmental Material Specifications as specified by the plans.



UNSIGNALIZED MIDBLOCK HIGH-VISIBILITY LONGITUDINAL CROSSWALK

NOTES:

1. Use stop bars with Stop Here For Pedestrians (R1-5b) signs at unsignalized midblock cross walks.
2. Use stop bars with STOP HERE ON RED (R10-6 or R10-6a) signs at mid block crosswalks controlled by traffic signals or pedestrian hybrid beacons.




CROSSWALK PAVEMENT MARKINGS

PM(4) - 22A

FILE: pm4-22a.dgn	DN:	CK:	DW:	CK:
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6-20				
6-22				
12-22				
220				

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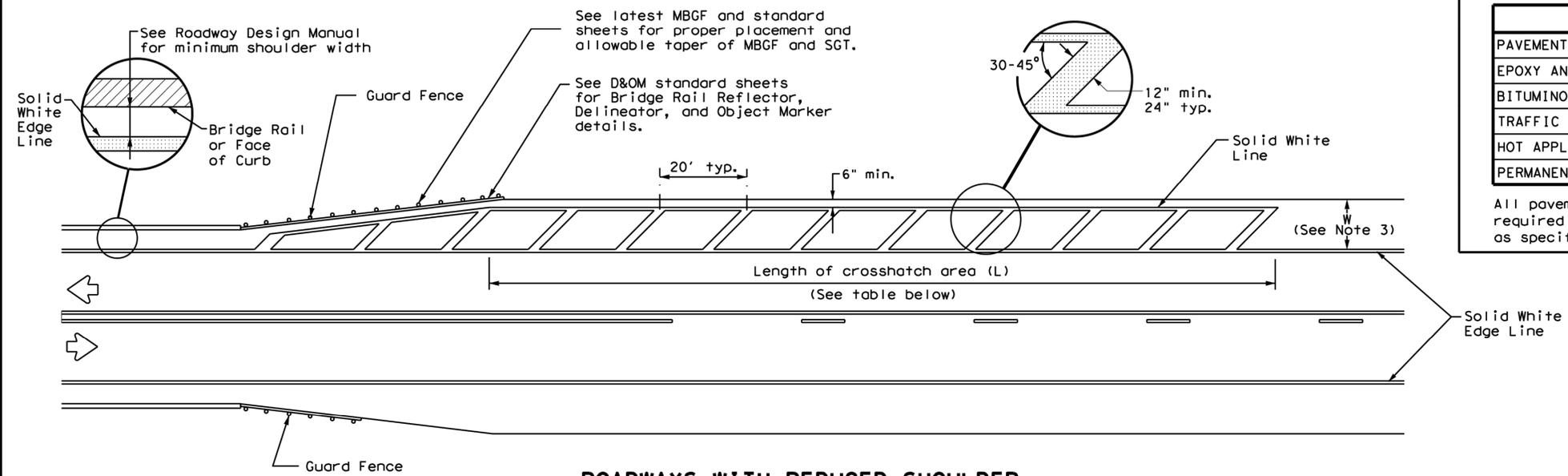
BRIGHTON PLACE RECONSTRUCTION

CROSSWALK PAVEMENT MARKINGS

SUBMITTED: 12/04/23	DESIGNED BY: JMS
SCALE: N/A	DRAWN BY: AA
DATE: 12/04/23	SHEET No.: 82 OF 101
SURVEY BY: CFA	DWG. No:
F B No.: -	

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of this standard to other formats or for incorrect results or damages resulting from its use.



ROADWAYS WITH REDUCED SHOULDER WIDTHS ACROSS BRIDGE OR CULVERT

CROSSHATCH LENGTH (L)	
Posted Speed (MPH)	L (ft)
30	300 ft
35	
40	
45	
50	500 ft
55	
60	
65	
70	
75	

NOTES

- Edge line striping shall be as shown in the plans or as directed by the Engineer. The edge line should not be placed less than 4 inches from the bridge rail or face of curb or 6 inches from the edge of pavement. This distance may vary due to pavement raveling or other conditions.
- No-passing zone on bridge approach is optional. If used, the no-passing zone shall be a minimum 500 feet long from the beginning of the bridge.
- The crosshatching should be required if the shoulder width in advance of the bridge is 4 feet or wider and a reduction of at least 3 feet in shoulder width across the bridge occurs.
- On divided highways, review both the right and left shoulder widths for the need for narrow bridge pavement markings.

MATERIAL SPECIFICATIONS	
PAVEMENT MARKERS (REFLECTORIZED)	DMS-4200
EPOXY AND ADHESIVES	DMS-6100
BITUMINOUS ADHESIVE FOR PAVEMENT MARKERS	DMS-6130
TRAFFIC PAINT	DMS-8200
HOT APPLIED THERMOPLASTIC	DMS-8220
PERMANENT PREFABRICATED PAVEMENT MARKINGS	DMS-8240

All pavement marking materials shall meet the required Departmental Material Specifications as specified by the plans.

NO.	DATE	REVISIONS



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CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

PAVEMENT MARKINGS FOR ROADWAYS WITH REDUCED SHOULDER WIDTHS ACROSS BRIDGE OR CULVERT

SUBMITTED: 12/04/23	DESIGNED BY: JMS
SCALE: N/A	DRAWN BY: AA
DATE: 12/04/23	SHEET No.: 83 OF 101
SURVEY BY: CFA	DWG. No:
F B No.: -	

Texas Department of Transportation
Traffic Safety Division Standard

PAVEMENT MARKINGS FOR ROADWAYS WITH REDUCED SHOULDER WIDTHS ACROSS BRIDGE OR CULVERT

PM(5) -22

FILE: pm5-22.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CR: TxDOT
©TxDOT December 2022	CONT	SECT	JOB	HIGHWAY
REVISIONS	DIST	COUNTY	SHEET NO.	

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BARRICADE AND CONSTRUCTION (BC) STANDARD SHEETS GENERAL NOTES:

- The Barricade and Construction Standard Sheets (BC sheets) are intended to show typical examples for placement of temporary traffic control devices, construction pavement markings, and typical work zone signs. The information contained in these sheets meet or exceed the requirements shown in the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD).
- The development and design of the Traffic Control Plan (TCP) is the responsibility of the Engineer.
- The Contractor may propose changes to the TCP that are signed and sealed by a licensed professional engineer for approval. The Engineer may develop, sign and seal Contractor proposed changes.
- The Contractor is responsible for installing and maintaining the traffic control devices as shown in the plans. The Contractor may not move or change the approximate location of any device without the approval of the Engineer.
- Geometric design of lane shifts and detours should, when possible, meet the applicable design criteria contained in manuals such as the American Association of State Highway and Transportation Officials (AASHTO), "A Policy on Geometric Design of Highways and Streets," the TxDOT "Roadway Design Manual" or engineering judgment.
- When projects abut, the Engineer(s) may omit the END ROAD WORK, TRAFFIC FINES DOUBLE, and other advance warning signs if the signing would be redundant and the work areas appear continuous to the motorists. If the adjacent project is completed first, the Contractor shall erect the necessary warning signs as shown on these sheets, the TCP sheets or as directed by the Engineer. The BEGIN ROAD WORK NEXT X MILES sign shall be revised to show appropriate work zone distance.
- The Engineer may require duplicate warning signs on the median side of divided highways where median width will permit and traffic volumes justify the signing.
- All signs shall be constructed in accordance with the details found in the "Standard Highway Sign Designs for Texas," latest edition. Sign details not shown in this manual shall be shown in the plans or the Engineer shall provide a detail to the Contractor before the sign is manufactured.
- The temporary traffic control devices shown in the illustrations of the BC sheets are examples. As necessary, the Engineer will determine the most appropriate traffic control devices to be used.
- Where highway construction or maintenance work is being undertaken, other than mobile operations as defined by the Texas Manual on Uniform Traffic Control Devices, CSJ limit signs are required. CSJ limit signs are shown on BC(2). The OBEY WARNING SIGNS STATE LAW sign, STAY ALERT TALK OR TEXT LATER and the WORK ZONE TRAFFIC FINES DOUBLE sign with plaque shall be erected in advance of the CSJ limits. The BEGIN ROAD WORK NEXT X MILES, CONTRACTOR and END ROAD WORK signs shall be erected at or near the CSJ limits. For mobile operations, CSJ limit signs are not required.
- Traffic control devices should be in place only while work is actually in progress or a definite need exists.
- The Engineer has the final decision on the location of all traffic control devices.
- Inactive equipment and work vehicles, including workers' private vehicles must be parked away from travel lanes. They should be as close to the right-of-way line as possible, or located behind a barrier or guardrail, or as approved by the Engineer.

WORKER SAFETY NOTES:

- Workers on foot who are exposed to traffic or to construction equipment within the right-of-way shall wear high-visibility safety apparel meeting the requirements of ISEA "American National Standard for High-Visibility Apparel," or equivalent revisions, and labeled as ANSI 107-2004 standard performance for Class 2 or 3 risk exposure. Class 3 garments should be considered for high traffic volume work areas or night time work.
- Except in emergency situations, flagger stations shall be illuminated when flagging is used at night.

COMPLIANT WORKZONE TRAFFIC CONTROL DEVICES

- Only pre-qualified products shall be used. The "Compliant Work Zone Traffic Control Devices List" (CWZTCD) describes pre-qualified products and their sources.
- Work zone traffic control devices shall be compliant with the Manual for Assessing safety Hardware (MASH).

THE DOCUMENTS BELOW CAN BE FOUND ON-LINE AT http://www.txdot.gov
COMPLIANT WORK ZONE TRAFFIC CONTROL DEVICES LIST (CWZTCD)
DEPARTMENTAL MATERIAL SPECIFICATIONS (DMS)
MATERIAL PRODUCER LIST (MPL)
ROADWAY DESIGN MANUAL - SEE "MANUALS (ONLINE MANUALS)"
STANDARD HIGHWAY SIGN DESIGNS FOR TEXAS (SHSD)
TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD)
TRAFFIC ENGINEERING STANDARD SHEETS

SHEET 1 OF 12

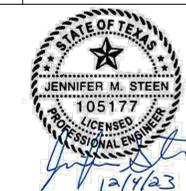
Traffic Safety Division Standard

**BARRICADE AND CONSTRUCTION
GENERAL NOTES
AND REQUIREMENTS**

BC (1) - 21

FILE: bc-21.dgn	DW: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
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REVISIONS				
4-03 7-13				
9-07 8-14				
5-10 5-21				
	DIST	COUNTY	SHEET NO.	

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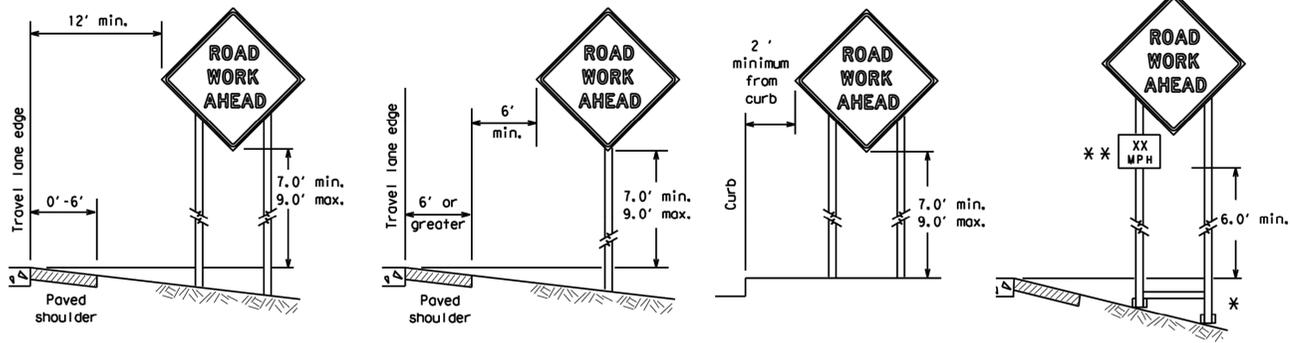


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BRIGHTON PLACE RECONSTRUCTION	
BARRICADE AND CONSTRUCTION GENERAL NOTES AND REQUIREMENTS	
SUBMITTED: 12/04/23	DESIGNED BY: JMS
SCALE: N/A	DRAWN BY: AA
DATE: 12/04/23	SHEET No.: 84 OF 101
SURVEY BY: CFA	DWG. No:
F B No.: -	

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TYPICAL MINIMUM CLEARANCES FOR LONG TERM AND INTERMEDIATE TERM SIGNS



* When placing skid supports on unlevel ground, the leg post lengths must be adjusted so the sign appears straight and plumb. Objects shall NOT be placed under skids as a means of leveling.

** When plaques are placed on dual-leg supports, they should be attached to the upright nearest the travel lane. Supplemental plaques (advisory or distance) should not cover the surface of the parent sign.

GENERAL NOTES FOR WORK ZONE SIGNS

- Contractor shall install and maintain signs in a straight and plumb condition and/or as directed by the Engineer.
- Wooden sign posts shall be painted white.
- Barricades shall NOT be used as sign supports.
- All signs shall be installed in accordance with the plans or as directed by the Engineer. Signs shall be used to regulate, warn, and guide the traveling public safely through the work zone.
- The Contractor may furnish either the sign design shown in the plans or in the "Standard Highway Sign Designs for Texas" (SHSD). The Engineer/Inspector may require the Contractor to furnish other work zone signs that are shown in the TMUTCD but may have been omitted from the plans. Any variation in the plans shall be documented by written agreement between the Engineer and the Contractor's Responsible Person. All changes must be documented in writing before being implemented. This can include documenting the changes in the Inspector's TxDOT diary and having both the Inspector and Contractor initial and date the agreed upon changes.
- The Contractor shall furnish sign supports listed in the "Compliant Work Zone Traffic Control Device List" (CWZTCD) for small roadside signs. Supports for temporary large roadside signs shall meet the requirements detailed on the Temporary Large Roadside Signs (TLRS) standard sheets. The Contractor shall install the sign support in accordance with the manufacturer's recommendations. If there is a question regarding installation procedures, the Contractor shall furnish the Engineer a copy of the manufacturer's installation recommendations so the Engineer can verify the correct procedures are being followed.
- The Contractor is responsible for installing signs on approved supports and replacing signs with damaged or cracked substrates and/or damaged or marred reflective sheeting as directed by the Engineer/Inspector.
- Identification markings may be shown only on the back of the sign substrate. The maximum height of letters and/or company logos used for identification shall be 1 inch.
- The Contractor shall replace damaged wood posts. New or damaged wood sign posts shall not be spliced.

DURATION OF WORK (as defined by the "Texas Manual on Uniform Traffic Control Devices" Part 6)

- The types of sign supports, sign mounting height, the size of signs, and the type of sign substrates can vary based on the type of work being performed. The Engineer is responsible for selecting the appropriate size sign for the type of work being performed. The Contractor is responsible for ensuring the sign support, sign mounting height and substrate meets manufacturer's recommendations in regard to crashworthiness and duration of work requirements.
 - Long-term stationary - work that occupies a location more than 3 days.
 - Intermediate-term stationary - work that occupies a location more than one daylight period up to 3 days, or nighttime work lasting more than one hour.
 - Short-term stationary - daytime work that occupies a location for more than 1 hour in a single daylight period.
 - Short, duration - work that occupies a location up to 1 hour.
 - Mobile - work that moves continuously or intermittently (stopping for up to approximately 15 minutes.)

SIGN MOUNTING HEIGHT

- The bottom of Long-term/Intermediate-term signs shall be at least 7 feet, but not more than 9 feet, above the paved surface, except as shown for supplemental plaques mounted below other signs.
- The bottom of Short-term/Short Duration signs shall be a minimum of 1 foot above the pavement surface but no more than 2 feet above the ground.
- Long-term/Intermediate-term Signs may be used in lieu of Short-term/Short Duration signing.
- Short-term/Short Duration signs shall be used only during daylight and shall be removed at the end of the workday or raised to appropriate Long-term/Intermediate sign height.
- Regulatory signs shall be mounted at least 7 feet, but not more than 9 feet, above the paved surface regardless of work duration.

SIZE OF SIGNS

- The Contractor shall furnish the sign sizes shown on BC (2) unless otherwise shown in the plans or as directed by the Engineer.

SIGN SUBSTRATES

- The Contractor shall ensure the sign substrate is installed in accordance with the manufacturer's recommendations for the type of sign support that is being used. The CWZTCD lists each substrate that can be used on the different types and models of sign supports.
- "Mesh" type materials are NOT an approved sign substrate, regardless of the tightness of the weave.
- All wooden individual sign panels fabricated from 2 or more pieces shall have one or more plywood cleat, 1/2" thick by 6" wide, fastened to the back of the sign and extending fully across the sign. The cleat shall be attached to the back of the sign using wood screws that do not penetrate the face of the sign panel. The screws shall be placed on both sides of the splice and spaced at 6" centers. The Engineer may approve other methods of splicing the sign face.

REFLECTIVE SHEETING

- All signs shall be retroreflective and constructed of sheeting meeting the color and retro-reflectivity requirements of DMS-8300 for rigid signs or DMS-8310 for roll-up signs. The web address for DMS specifications is shown on BC(1).
- White sheeting, meeting the requirements of DMS-8300 Type A, shall be used for signs with a white background.
- Orange sheeting, meeting the requirements of DMS-8300 Type B_{FL} or Type C_{FL}, shall be used for rigid signs with orange backgrounds.

SIGN LETTERS

- All sign letters and numbers shall be clear, and open rounded type uppercase alphabet letters as approved by the Federal Highway Administration (FHWA) and as published in the "Standard Highway Sign Design for Texas" manual. Signs, letters and numbers shall be of first class workmanship in accordance with Department Standards and Specifications.

REMOVING OR COVERING

- When sign messages may be confusing or do not apply, the signs shall be removed or completely covered.
- Long-term stationary or intermediate stationary signs installed on square metal tubing may be turned away from traffic 90 degrees when the sign message is not applicable. This technique may not be used for signs installed in the median of divided highways or near any intersections where the sign may be seen from approaching traffic.
- Signs installed on wooden skids shall not be turned at 90 degree angles to the roadway. These signs should be removed or completely covered when not required.
- When signs are covered, the material used shall be opaque, such as heavy mil black plastic, or other materials which will cover the entire sign face and maintain their opaque properties under automobile headlights at night, without damaging the sign sheeting.
- Burlap shall NOT be used to cover signs.
- Duct tape or other adhesive material shall NOT be affixed to a sign face.
- Signs and anchor stubs shall be removed and holes backfilled upon completion of work.

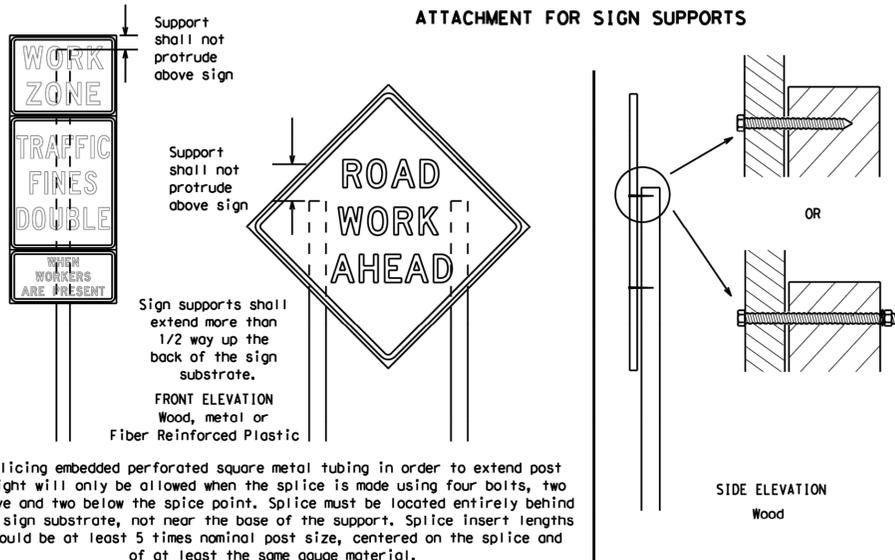
SIGN SUPPORT WEIGHTS

- Where sign supports require the use of weights to keep from turning over, the use of sandbags with dry, cohesionless sand should be used.
- The sandbags will be tied shut to keep the sand from spilling and to maintain a constant weight.
- Rock, concrete, iron, steel or other solid objects shall not be permitted for use as sign support weights.
- Sandbags should weigh a minimum of 35 lbs and a maximum of 50 lbs.
- Sandbags shall be made of a durable material that tears upon vehicular impact. Rubber (such as tire inner tubes) shall NOT be used.
- Rubber ballasts designed for channelizing devices should not be used for ballast on portable sign supports. Sign supports designed and manufactured with rubber bases may be used when shown on the CWZTCD list.
- Sandbags shall only be placed along or laid over the base supports of the traffic control device and shall not be suspended above ground level or hung with rope, wire, chains or other fasteners. Sandbags shall be placed along the length of the skids to weigh down the sign support.
- Sandbags shall NOT be placed under the skid and shall not be used to level sign supports placed on slopes.

FLAGS ON SIGNS

- Flags may be used to draw attention to warning signs. When used, the flag shall be 16 inches square or larger and shall be orange or fluorescent red-orange in color. Flags shall not be allowed to cover any portion of the sign face.

ATTACHMENT FOR SIGN SUPPORTS

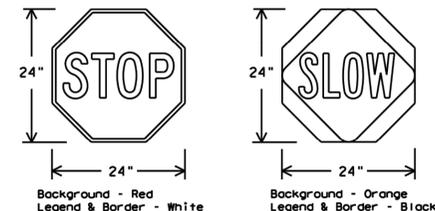


Attachment to wooden supports will be by bolts and nuts or screws. Use TxDOT's or manufacturer's recommended procedures for attaching sign substrates to other types of sign supports

Nails shall NOT be allowed. Each sign shall be attached directly to the sign support. Multiple signs shall not be joined or spliced by any means. Wood supports shall not be extended or repaired by splicing or other means.

STOP/SLOW PADDLES

- STOP/SLOW paddles are the primary method to control traffic by flaggers. The STOP/SLOW paddle size should be 24" x 24".
- STOP/SLOW paddles shall be retroreflectORIZED when used at night.
- STOP/SLOW paddles may be attached to a staff with a minimum length of 6' to the bottom of the sign.
- Any lights incorporated into the STOP or SLOW paddle faces shall only be as specifically described in Section 6E.03 Hand Signaling Devices in the TMUTCD.



CONTRACTOR REQUIREMENTS FOR MAINTAINING PERMANENT SIGNS WITHIN THE PROJECT LIMITS

- Permanent signs are used to give notice of traffic laws or regulations, call attention to conditions that are potentially hazardous to traffic operations, show route designations, destinations, directions, distances, services, points of interest, and other geographical, recreational, specific service (LOGO), or cultural information. Drivers proceeding through a work zone need the same, if not better route guidance as normally installed on a roadway without construction.
- When permanent regulatory or warning signs conflict with work zone conditions, remove or cover the permanent signs until the permanent sign message matches the roadway condition. For details for covering large guide signs see the TS-CD standard.
- When existing permanent signs are moved and relocated due to construction purposes, they shall be visible to motorists at all times.
- If existing signs are to be relocated on their original supports, they shall be installed on crashworthy bases as shown on the SMD Standard sheets. The signs shall meet the required mounting heights shown on the BC Sheets or the SMD Standards. This work should be paid for under the appropriate pay item for relocating existing signs.
- If permanent signs are to be removed and relocated using temporary supports, the Contractor shall use crashworthy supports as shown on the BC standard sheets, TLRS standard sheets or the CWZTCD list. The signs shall meet the required mounting heights shown on the BC, or the SMD standard sheets during construction. This work should be paid for under the appropriate pay item for relocating existing signs.
- Any sign or traffic control device that is struck or damaged by the Contractor or his/her construction equipment shall be replaced as soon as possible by the Contractor to ensure proper guidance for the motorists. This will be subsidiary to Item 502.

SHEETING REQUIREMENTS (WHEN USED AT NIGHT)		
USAGE	COLOR	SIGN FACE MATERIAL
BACKGROUND	RED	TYPE B OR C SHEETING
BACKGROUND	ORANGE	TYPE B _{FL} OR C _{FL} SHEETING
LEGEND & BORDER	WHITE	TYPE B OR C SHEETING
LEGEND & BORDER	BLACK	ACRYLIC NON-REFLECTIVE FILM

SHEET 4 OF 12

Texas Department of Transportation
Traffic Safety Division Standard

**BARRICADE AND CONSTRUCTION
TEMPORARY SIGN NOTES**

BC (4) - 21

FILE: bc-21.dgn	DW: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
© TxDOT November 2002	CONT	SECT	JOB	HIGHWAY
REVISIONS				
9-07 8-14				
7-13 5-21				
	DIST	COUNTY		SHEET NO.

NO.	DATE	REVISIONS

CobbFendley
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www.cobbfendley.com

CITY OF SPRING VALLEY VILLAGE

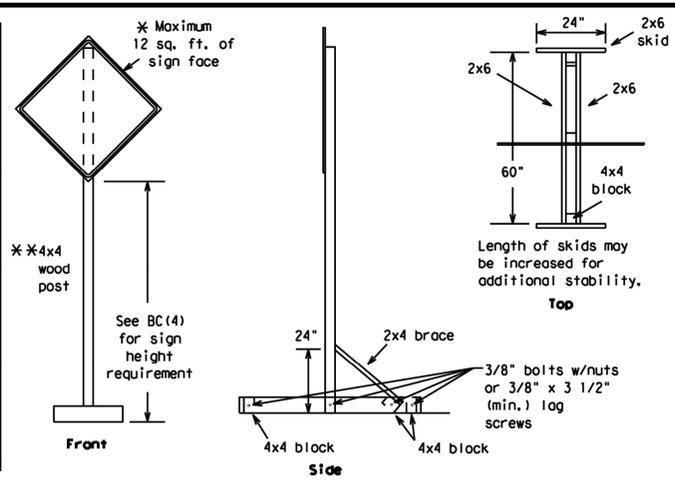
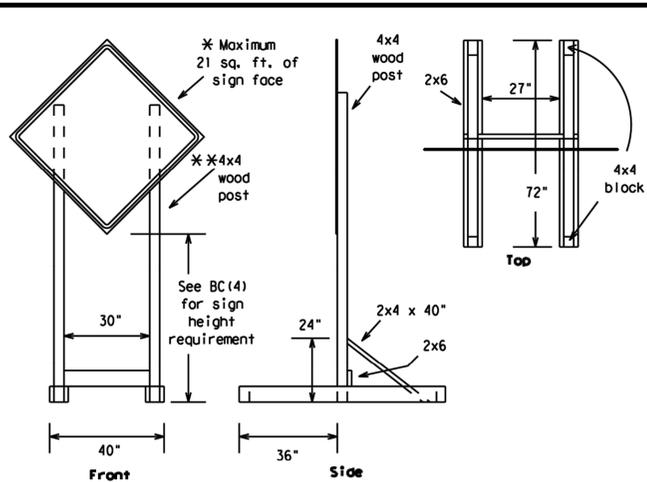
BRIGHTON PLACE RECONSTRUCTION

BARRICADE AND CONSTRUCTION
TEMPORARY SIGN NOTES

SUBMITTED: 12/04/23	DESIGNED BY: JMS
SCALE: N/A	DRAWN BY: AA
DATE: 12/04/23	SHEET No.: 85 OF 101
SURVEY BY: CFA	DWG. No:
F B No.: -	

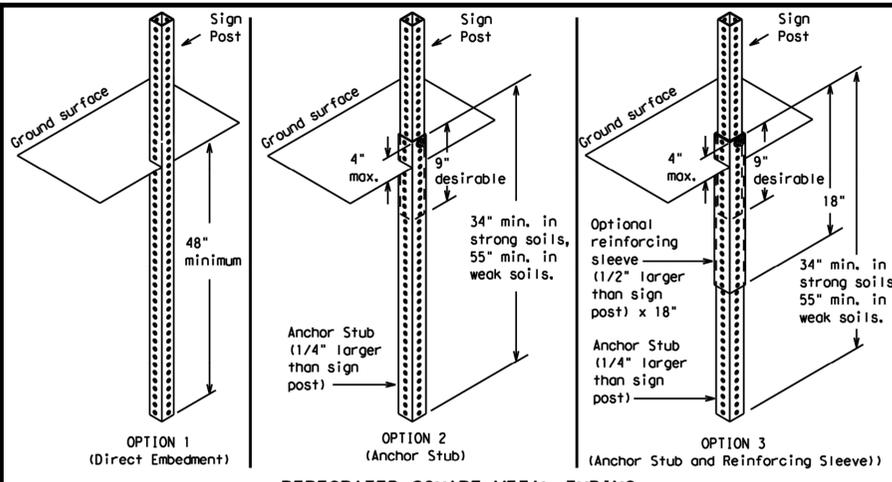
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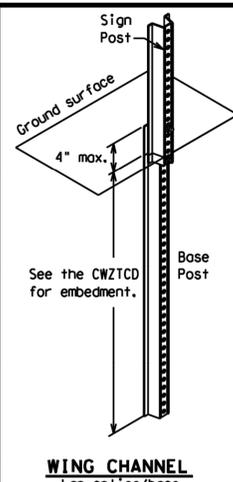
SKID MOUNTED WOOD SIGN SUPPORTS

* LONG/INTERMEDIATE TERM STATIONARY - PORTABLE SKID MOUNTED SIGN SUPPORTS

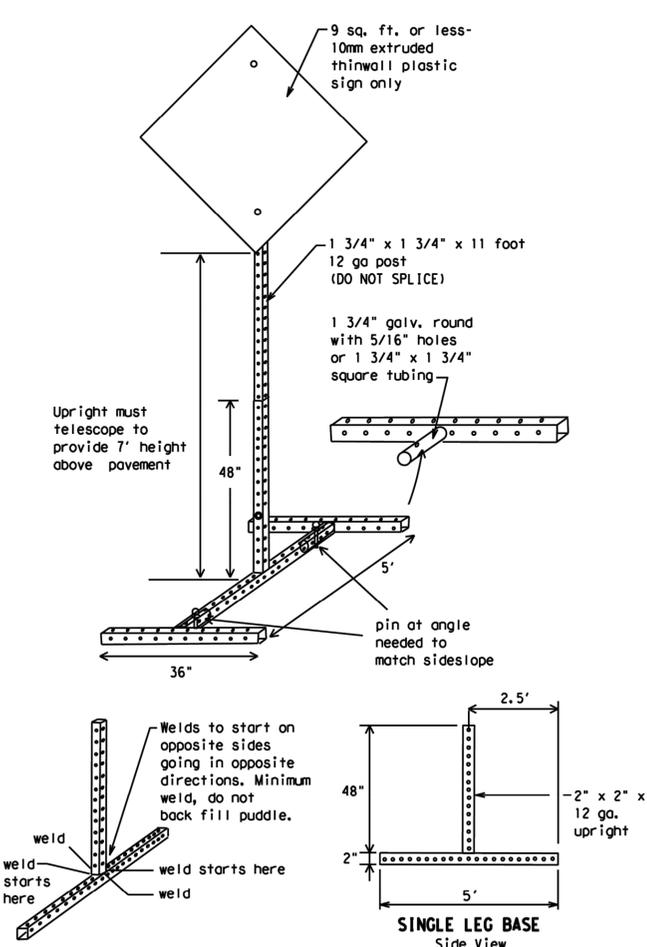


GROUND MOUNTED SIGN SUPPORTS

Refer to the CWZTCD and the manufacturer's installation procedure for each type sign support. The maximum sign square footage shall adhere to the manufacturer's recommendation. Two post installations can be used for larger signs.

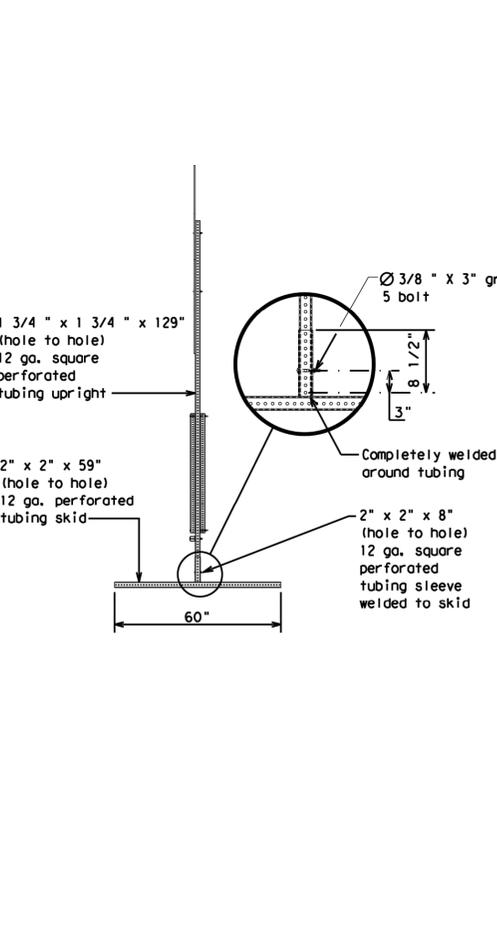
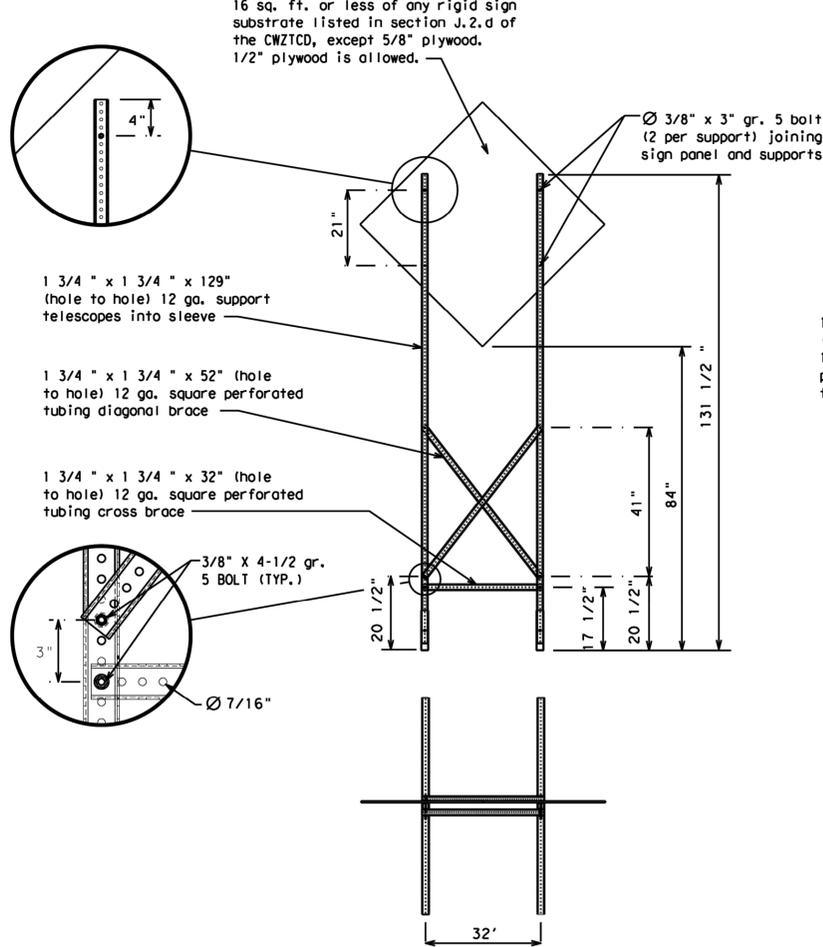


WING CHANNEL
Lap-splice/base bolted anchor



SKID MOUNTED PERFORATED SQUARE STEEL TUBING SIGN SUPPORTS

* LONG/INTERMEDIATE TERM STATIONARY - PORTABLE SKID MOUNTED SIGN SUPPORTS



WEDGE ANCHORS

Both steel and plastic Wedge Anchor Systems as shown on the SMD Standard Sheets may be used as temporary sign supports for signs up to 10 square feet of sign face. They may be set in concrete or in sturdy soils if approved by the Engineer. (See web address for "Traffic Engineering Standard Sheets" on BC(1)).

OTHER DESIGNS

MORE DETAILS OF APPROVED LONG/INTERMEDIATE AND SHORT TERM SUPPORTS CAN BE FOUND ON THE CWZTCD LIST. SEE BC(1) FOR WEBSITE LOCATION.

GENERAL NOTES

1. Nails may be used in the assembly of wooden sign supports, but 3/8" bolts with nuts or 3/8" x 3 1/2" log screws must be used on every joint for final connection.
2. No more than 2 sign posts shall be placed within a 7 ft. circle, except for specific materials noted on the CWZTCD List.
3. When project is completed, all sign supports and foundations shall be removed from the project site. This will be considered subsidiary to Item 502.

- * See BC(4) for definition of "Work Duration."
- ** Wood sign posts MUST be one piece. Splicing will NOT be allowed. Posts shall be painted white.
- See the CWZTCD for the type of sign substrate that can be used for each approved sign support.

SHEET 5 OF 12



BARRICADE AND CONSTRUCTION TYPICAL SIGN SUPPORT

BC(5)-21

FILE:	bc-21.dgn	DN:	TxDOT	CK:	TxDOT	DN:	TxDOT	CK:	TxDOT
©	TxDOT	November	2002	CONT	SECT	JOB	HIGHWAY		
REVISIONS									
9-07	8-14								
7-13	5-21								
DIST		COUNTY		SHEET NO.					

NO.	DATE	REVISIONS



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CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

BARRICADE AND CONSTRUCTION TYPICAL SIGN SUPPORT

SUBMITTED: 12/04/23	DESIGNED BY: JMS
SCALE: N/A	DRAWN BY: AA
DATE: 12/04/23	SHEET No.: 86 OF 101
SURVEY BY: CFA	DWG. No.:
F B No.: -	

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GENERAL NOTES

- For long term stationary work zones on freeways, drums shall be used as the primary channelizing device.
- For intermediate term stationary work zones on freeways, drums should be used as the primary channelizing device but may be replaced in tangent sections by vertical panels, or 42" two-piece cones. In tangent sections, one-piece cones may be used with the approval of the Engineer but only if personnel are present on the project at all times to maintain the cones in proper position and location.
- For short term stationary work zones on freeways, drums are the preferred channelizing device but may be replaced in tapers, transitions and tangent sections by vertical panels, two-piece cones or one-piece cones as approved by the Engineer.
- Drums and all related items shall comply with the requirements of the current version of the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD) and the "Compliant Work Zone Traffic Control Devices List" (CWZTCD).
- Drums, bases, and related materials shall exhibit good workmanship and shall be free from objectionable marks or defects that would adversely affect their appearance or serviceability.
- The Contractor shall have a maximum of 24 hours to replace any plastic drums identified for replacement by the Engineer/Inspector. The replacement device must be an approved device.

GENERAL DESIGN REQUIREMENTS

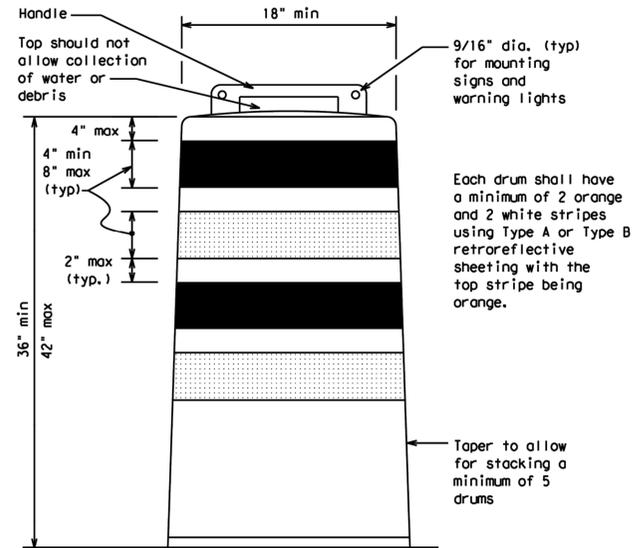
- Pre-qualified plastic drums shall meet the following requirements:
- Plastic drums shall be a two-piece design; the "body" of the drum shall be the top portion and the "base" shall be the bottom.
 - The body and base shall lock together in such a manner that the body separates from the base when impacted by a vehicle traveling at a speed of 20 MPH or greater but prevents accidental separation due to normal handling and/or air turbulence created by passing vehicles.
 - Plastic drums shall be constructed of lightweight flexible, and deformable materials. The Contractor shall NOT use metal drums or single piece plastic drums as channelization devices or sign supports.
 - Drums shall present a profile that is a minimum of 18 inches in width at the 36 inch height when viewed from any direction. The height of drum unit (body installed on base) shall be a minimum of 36 inches and a maximum of 42 inches.
 - The top of the drum shall have a built-in handle for easy pickup and shall be designed to drain water and not collect debris. The handle shall have a minimum of two widely spaced 9/16 inch diameter holes to allow attachment of a warning light, warning reflector unit or approved compliant sign.
 - The exterior of the drum body shall have a minimum of four alternating orange and white retroreflective circumferential stripes not less than 4 inches nor greater than 8 inches in width. Any non-reflectORIZED space between any two adjacent stripes shall not exceed 2 inches in width.
 - Bases shall have a maximum width of 36 inches, a maximum height of 4 inches, and a minimum of two footholds of sufficient size to allow base to be held down while separating the drum body from the base.
 - Plastic drums shall be constructed of ultra-violet stabilized, orange, high-density polyethylene (HDPE) or other approved material.
 - Drum body shall have a maximum unballasted weight of 11 lbs.
 - Drum and base shall be marked with manufacturer's name and model number.

RETROREFLECTIVE SHEETING

- The stripes used on drums shall be constructed of sheeting meeting the color and retroreflectivity requirements of Departmental Materials Specification DMS-8300, "Sign Face Materials." Type A or Type B reflective sheeting shall be supplied unless otherwise specified in the plans.
- The sheeting shall be suitable for use on and shall adhere to the drum surface such that, upon vehicular impact, the sheeting shall remain adhered in-place and exhibit no delaminating, cracking, or loss of retroreflectivity other than that loss due to abrasion of the sheeting surface.

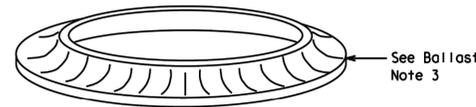
BALLAST

- Unballasted bases shall be large enough to hold up to 50 lbs. of sand. This base, when filled with the ballast material, should weigh between 35 lbs (minimum) and 50 lbs (maximum). The ballast may be sand in one to three sandbags separate from the base, sand in a sand-filled plastic base, or other ballasting devices as approved by the Engineer. Stacking of sandbags will be allowed, however height of sandbags above pavement surface may not exceed 12 inches.
- Bases with built-in ballast shall weigh between 40 lbs. and 50 lbs. Built-in ballast can be constructed of an integral crumb rubber base or a solid rubber base.
- Recycled truck tire sidewalls may be used for ballast on drums approved for this type of ballast on the CWZTCD list.
- The ballast shall not be heavy objects, water, or any material that would become hazardous to motorists, pedestrians, or workers when the drum is struck by a vehicle.
- When used in regions susceptible to freezing, drums shall have drainage holes in the bottoms so that water will not collect and freeze becoming a hazard when struck by a vehicle.
- Ballast shall not be placed on top of drums.
- Adhesives may be used to secure base of drums to pavement.

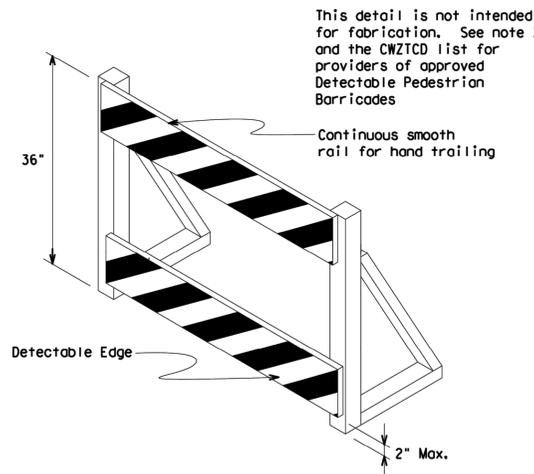


Each drum shall have a minimum of 2 orange and 2 white stripes using Type A or Type B retroreflective sheeting with the top stripe being orange.

Taper to allow for stacking a minimum of 5 drums



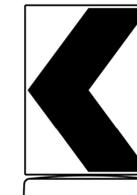
See Ballast Note 3



This detail is not intended for fabrication. See note 3 and the CWZTCD list for providers of approved Detectable Pedestrian Barricades

DETECTABLE PEDESTRIAN BARRICADES

- When existing pedestrian facilities are disrupted, closed, or relocated in a TTC zone, the temporary facilities shall be detectable and include accessibility features consistent with the features present in the existing pedestrian facility. Refer to WZ(BTS-2) for Pedestrian Control requirements for Sidewalk Diversions, Sidewalk Detours and Crosswalk Closures.
- Where pedestrians with visual disabilities normally use the closed sidewalk, a Detectable Pedestrian Barricade shall be placed across the full width of the closed sidewalk instead of a Type 3 Barricade.
- Detectable pedestrian barricades similar to the one pictured above, longitudinal channelizing devices, some concrete barriers, and wood or chain link fencing with a continuous detectable edging can satisfactorily delineate a pedestrian path.
- Tape, rope, or plastic chain strung between devices are not detectable, do not comply with the design standards in the "Americans with Disabilities Act Accessibility Guidelines (ADAAG)" and should not be used as a control for pedestrian movements.
- Warning lights shall not be attached to detectable pedestrian barricades.
- Detectable pedestrian barricades should use 8" nominal barricade rails as shown on BC(10) provided that the top rail provides a smooth continuous rail suitable for hand trailing with no splinters, burrs, or sharp edges.



18" x 24" Sign (Maximum Sign Dimension) Chevron CW1-8, Opposing Traffic Lane Divider, Driveway sign D70a, Keep Right R4 series or other signs as approved by Engineer



12" x 24" Vertical Panel mount with diagonals sloping down towards travel way

Plywood, Aluminum or Metal sign substrates shall NOT be used on plastic drums

SIGNS, CHEVRONS, AND VERTICAL PANELS MOUNTED ON PLASTIC DRUMS

- Signs used on plastic drums shall be manufactured using substrates listed on the CWZTCD.
- Chevrons and other work zone signs with an orange background shall be manufactured with Type B₁ or Type C₁ Orange sheeting meeting the color and retroreflectivity requirements of DMS-8300, "Sign Face Material," unless otherwise specified in the plans.
- Vertical Panels shall be manufactured with orange and white sheeting meeting the requirements of DMS-8300 Type A or Type B. Diagonal stripes on Vertical Panels shall slope down toward the intended traveled lane.
- Other sign messages (text or symbolic) may be used as approved by the Engineer. Sign dimensions shall not exceed 18 inches in width or 24 inches in height, except for the R9 series signs discussed in note 8 below.
- Signs shall be installed using a 1/2 inch bolt (nominal) and nut, two washers, and one locking washer for each connection.
- Mounting bolts and nuts shall be fully engaged and adequately torqued. Bolts should not extend more than 1/2 inch beyond nuts.
- Chevrons may be placed on drums on the outside of curves, on merging tapers or on shifting tapers. When used in these locations, they may be placed on every drum or spaced not more than an every third drum. A minimum of three (3) should be used at each location called for in the plans.
- R9-9, R9-10, R9-11 and R9-11a Sidewalk Closed signs which are 24 inches wide may be mounted on plastic drums, with approval of the Engineer.

SHEET 8 OF 12

Texas Department of Transportation Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION CHANNELIZING DEVICES

BC (8) - 21

FILE: bc-21.dgn	DW: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
© TxDOT November 2002	CONT	SECT	JOB	HIGHWAY
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9-07 5-21				
7-13				
102				

NO.	DATE	REVISIONS



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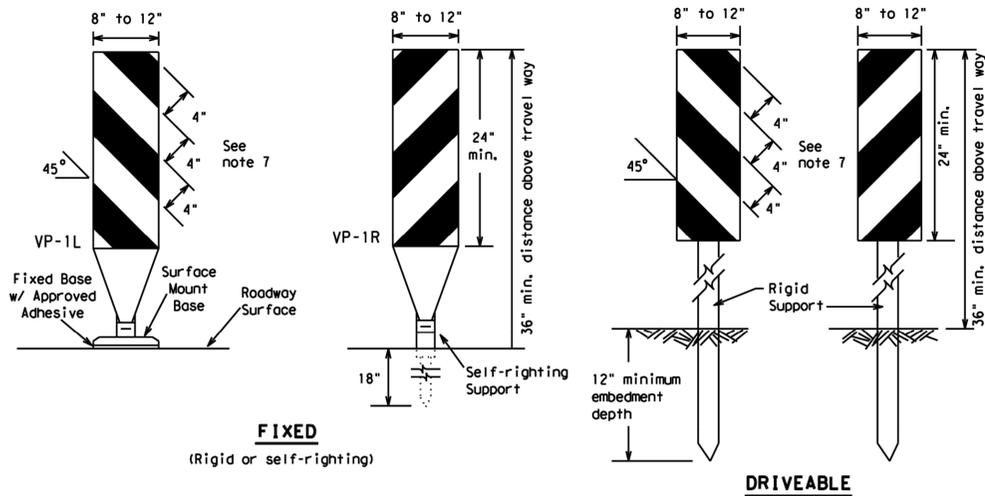
BRIGHTON PLACE RECONSTRUCTION

BARRICADE AND CONSTRUCTION CHANNELIZING DEVICES

SUBMITTED: 12/04/23	DESIGNED BY: JMS
SCALE: N/A	DRAWN BY: AA
DATE: 12/04/23	SHEET No.: 87 OF 101
SURVEY BY: CFA	DWG. No:
F B No.: -	

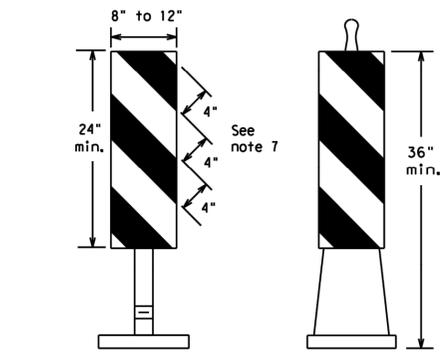
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FIXED
(Rigid or self-righting)

DRIVEABLE

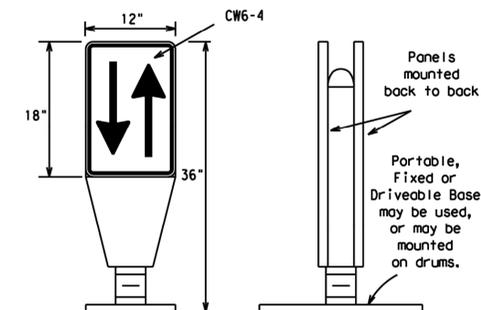


(Rigid or self-righting)

PORTABLE

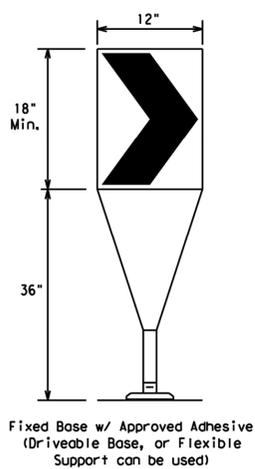
VERTICAL PANELS (VPs)

- Vertical Panels (VP's) are normally used to channelize traffic or divide opposing lanes of traffic.
- VP's may be used in daytime or nighttime situations. They may be used at the edge of shoulder drop-offs and other areas such as lane transitions where positive daytime and nighttime delineation is required. The Engineer/Inspector shall refer to the Roadway Design Manual for additional requirements on the use VP's for drop-offs.
- VP's should be mounted back to back if used at the edge of cuts adjacent to two-way two lane roadways. Stripes are to be reflective orange and reflective white and should always slope downward toward the travel lane.
- VP's used on expressways and freeways or other high speed roadways, may have more than 270 square inches of retroreflective area facing traffic.
- Self-righting supports are available with portable base. See "Compliant Work Zone Traffic Control Devices List" (CWZTCD).
- Sheeting for the VP's shall be retroreflective Type A or Type B conforming to Departmental Material Specification DMS-8300, unless noted otherwise.
- Where the height of reflective material on the vertical panel is 36 inches or greater, a panel stripe of 6 inches shall be used.



OPPOSING TRAFFIC LANE DIVIDERS (OTLD)

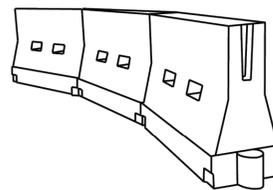
- Opposing Traffic Lane Dividers (OTLD) are delineation devices designed to convert a normal one-way roadway section to two-way operation. OTLD's are used on temporary centerlines. The upward and downward arrows on the sign's face indicate the direction of traffic on either side of the divider. The base is secured to the pavement with an adhesive or rubber weight to minimize movement caused by a vehicle impact or wind gust.
- The OTLD may be used in combination with 42" cones or VPs.
- Spacing between the OTLD shall not exceed 500 feet. 42" cones or VPs placed between the OTLD's should not exceed 100 foot spacing.
- The OTLD shall be orange with a black non-reflective legend. Sheeting for the OTLD shall be retroreflective Type B_{FL} or Type C_{FL} conforming to Departmental Material Specification DMS-8300, unless noted otherwise. The legend shall meet the requirements of DMS-8300.



Fixed Base w/ Approved Adhesive (Driveable Base, or Flexible Support can be used)

CHEVRONS

- The chevron shall be a vertical rectangle with a minimum size of 12 by 18 inches.
- Chevrons are intended to give notice of a sharp change of alignment with the direction of travel and provide additional emphasis and guidance for vehicle operators with regard to changes in horizontal alignment of the roadway.
- Chevrons, when used, shall be erected on the outside of a sharp curve or turn, or on the far side of an intersection. They shall be in line with and at right angles to approaching traffic. Spacing should be such that the motorist always has three in view, until the change in alignment eliminates its need.
- To be effective, the chevron should be visible for at least 500 feet.
- Chevrons shall be orange with a black nonreflective legend. Sheeting for the chevron shall be retroreflective Type B_{FL} or Type C_{FL} conforming to Departmental Material Specification DMS-8300, unless noted otherwise. The legend shall meet the requirements of DMS-8300.
- For Long Term Stationary use on tapers or transitions on freeways and divided highways, self-righting chevrons may be used to supplement plastic drums but not to replace plastic drums.



LONGITUDINAL CHANNELIZING DEVICES (LCD)

- LCDs are crashworthy, lightweight, deformable devices that are highly visible, have good target value and can be connected together. They are not designed to contain or redirect a vehicle on impact.
- LCDs may be used instead of a line of cones or drums.
- LCDs shall be placed in accordance to application and installation requirements specific to the device, and used only when shown on the CWZTCD list.
- LCDs should not be used to provide positive protection for obstacles, pedestrians or workers.
- LCDs shall be supplemented with retroreflective delineation as required for temporary barriers on BC(7) when placed roughly parallel to the travel lanes.
- LCDs used as barricades placed perpendicular to traffic should have at least one row of reflective sheeting meeting the requirements for barricade rails as shown on BC(10). Place reflective sheeting near the top of the LCD along the full length of the device.

WATER BALLASTED SYSTEMS USED AS BARRIERS

- Water ballasted systems used as barriers shall not be used solely to channelize road users, but also to protect the work space per the appropriate Manual for Assessing Safety Hardware (MASH) crashworthiness requirements based on roadway speed and barrier application.
- Water ballasted systems used to channelize vehicular traffic shall be supplemented with retroreflective delineation or channelizing devices to improve daytime/nighttime visibility. They may also be supplemented with pavement markings.
- Water ballasted systems used as barriers shall be placed in accordance to application and installation requirements specific to the device, and used only when shown on the CWZTCD list.
- Water ballasted systems used as barriers should not be used for a merging taper except in low speed (less than 45 MPH) urban areas. When used on a taper in a low speed urban area, the taper shall be delineated and the taper length should be designed to optimize road user operations considering the available geometric conditions.
- When water ballasted systems used as barriers have blunt ends exposed to traffic, they should be attenuated as per manufacturer recommendations or flared to a point outside the clear zone.

If used to channelize pedestrians, longitudinal channelizing devices or water ballasted systems must have a continuous detectable bottom for users of long cones and the top of the unit shall not be less than 32 inches in height.

HOLLOW OR WATER BALLASTED SYSTEMS USED AS LONGITUDINAL CHANNELIZING DEVICES OR BARRIERS

GENERAL NOTES

- Work Zone channelizing devices illustrated on this sheet may be installed in close proximity to traffic and are suitable for use on high or low speed roadways. The Engineer/Inspector shall ensure that spacing and placement is uniform and in accordance with the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD).
- Channelizing devices shown on this sheet may have a driveable, fixed or portable base. The requirement for self-righting channelizing devices must be specified in the General Notes or other plan sheets.
- Channelizing devices on self-righting supports should be used in work zone areas where channelizing devices are frequently impacted by errant vehicles or vehicle related wind gusts making alignment of the channelizing devices difficult to maintain. Locations of these devices shall be detailed elsewhere in the plans. These devices shall conform to the TMUTCD and the "Compliant Work Zone Traffic Control Devices List" (CWZTCD).
- The Contractor shall maintain devices in a clean condition and replace damaged, nonreflective, faded, or broken devices and bases as required by the Engineer/Inspector. The Contractor shall be required to maintain proper device spacing and alignment.
- Portable bases shall be fabricated from virgin and/or recycled rubber. The portable bases shall weigh a minimum of 30 lbs.
- Pavement surfaces shall be prepared in a manner that ensures proper bonding between the adhesives, the fixed mount bases and the pavement surface. Adhesives shall be prepared and applied according to the manufacturer's recommendations.
- The installation and removal of channelizing devices shall not cause detrimental effects to the final pavement surfaces, including pavement surface discoloration or surface integrity. Driveable bases shall not be permitted on final pavement surfaces. The Engineer/Inspector shall approve all application and removal procedures of fixed bases.

Posted Speed	Formula	Minimum Desirable Taper Lengths * *			Suggested Maximum Spacing of Channelizing Devices	
		10' Offset	11' Offset	12' Offset	On a Taper	On a Tangent
30	L = WS ² / 60	150'	165'	180'	30'	60'
35		205'	225'	245'	35'	70'
40	L = WS	265'	295'	320'	40'	80'
45		450'	495'	540'	45'	90'
50		500'	550'	600'	50'	100'
55		550'	605'	660'	55'	110'
60		600'	660'	720'	60'	120'
65		650'	715'	780'	65'	130'
70		700'	770'	840'	70'	140'
75		750'	825'	900'	75'	150'
80	800'	880'	960'	80'	160'	

* **Taper lengths have been rounded off.
L=Length of Taper (FT.) W=Width of Offset (FT.)
S=Posted Speed (MPH)

SUGGESTED MAXIMUM SPACING OF CHANNELIZING DEVICES AND MINIMUM DESIRABLE TAPER LENGTHS

SHEET 9 OF 12



BARRICADE AND CONSTRUCTION CHANNELIZING DEVICES

BC (9) - 21

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CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

BARRICADE AND CONSTRUCTION CHANNELIZING DEVICES

SUBMITTED: 12/04/23	DESIGNED BY: JMS
SCALE: N/A	DRAWN BY: AA
DATE: 12/04/23	SHEET No.: 88 OF 101
SURVEY BY: CFA	DWG. No:
F B No.: -	

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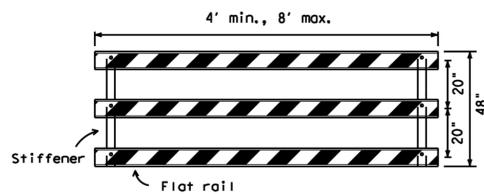
TYPE 3 BARRICADES

1. Refer to the Compliant Work Zone Traffic Control Devices List (CWZTCD) for details of the Type 3 Barricades and a list of all materials used in the construction of Type 3 Barricades.
2. Type 3 Barricades shall be used at each end of construction projects closed to all traffic.
3. Barricades extending across a roadway should have stripes that slope downward in the direction toward which traffic must turn in detouring. When both right and left turns are provided, the chevron striping may slope downward in both directions from the center of the barricade. Where no turns are provided at a closed road, striping should slope downward in both directions toward the center of roadway.
4. Striping of rails, for the right side of the roadway, should slope downward to the left. For the left side of the roadway, striping should slope downward to the right.
5. Identification markings may be shown only on the back of the barricade rails. The maximum height of letters and/or company logos used for identification shall be 1".
6. Barricades shall not be placed parallel to traffic unless an adequate clear zone is provided.
7. Warning lights shall NOT be installed on barricades.
8. Where barricades require the use of weights to keep from turning over, the use of sandbags with dry, cohesionless sand is recommended. The sandbags will be tied shut to keep the sand from spilling and to maintain a constant weight. Sand bags shall not be stacked in a manner that covers any portion of a barricade rails reflective sheeting. Rock, concrete, iron, steel or other solid objects will NOT be permitted. Sandbags should weigh a minimum of 35 lbs and a maximum of 50 lbs. Sandbags shall be made of a durable material that tears upon vehicular impact. Rubber (such as tire inner tubes) shall not be used for sandbags. Sandbags shall only be placed along or upon the base supports of the device and shall not be suspended above ground level or hung with rope, wire, chains or other fasteners.
9. Sheeting for barricades shall be retroreflective Type A or Type B conforming to Departmental Material Specification DMS-8300 unless otherwise noted.

Barricades shall NOT be used as a sign support.

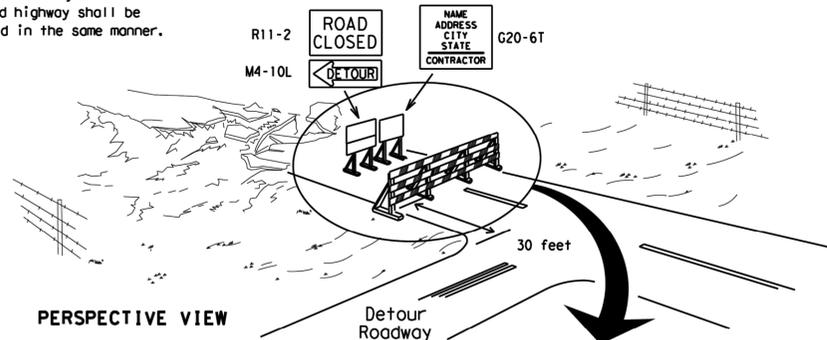


TYPICAL STRIPING DETAIL FOR BARRICADE RAIL



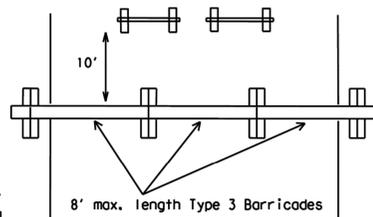
TYPICAL PANEL DETAIL FOR SKID OR POST TYPE BARRICADES

Each roadway of a divided highway shall be barricaded in the same manner.



PERSPECTIVE VIEW

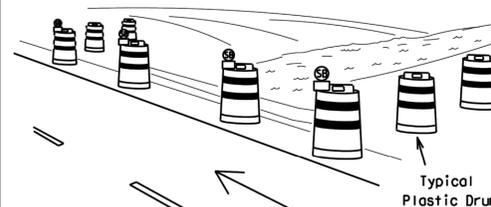
The three rails on Type 3 barricades shall be reflectorized orange and reflective white stripes on one side facing one-way traffic and both sides for two-way traffic. Barricade striping should slant downward in the direction of detour.



PLAN VIEW

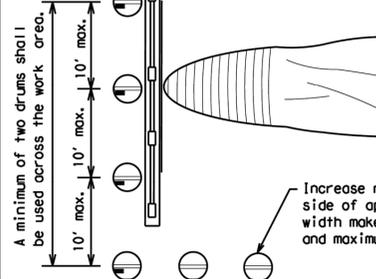
1. Signs should be mounted on independent supports at a 7 foot mounting height in center of roadway. The signs should be a minimum of 10 feet behind Type 3 Barricades.
2. Advance signing shall be as specified elsewhere in the plans.

TYPE 3 BARRICADE (POST AND SKID) TYPICAL APPLICATION



PERSPECTIVE VIEW

These drums are not required on one-way roadway



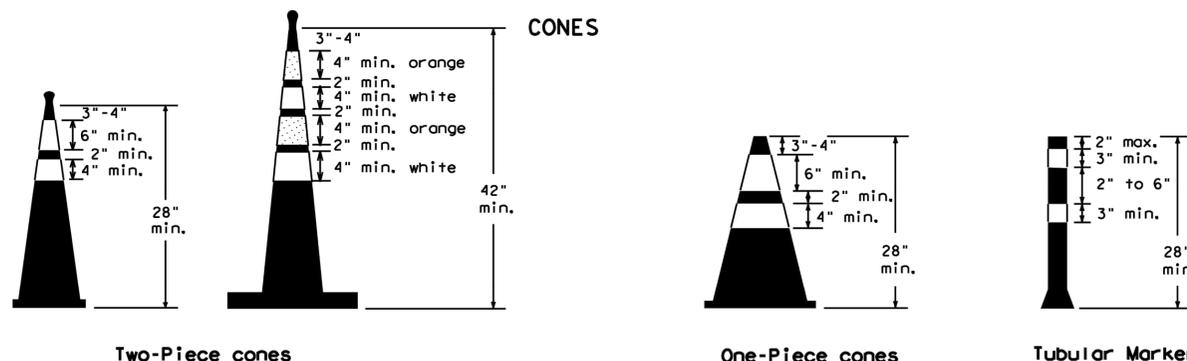
PLAN VIEW

CULVERT WIDENING OR OTHER ISOLATED WORK WITHIN THE PROJECT LIMITS

1. Where positive redirection capability is provided, drums may be omitted.
2. Plastic construction fencing may be used with drums for safety as required in the plans.
3. Vertical Panels on flexible support may be substituted for drums when the shoulder width is less than 4 feet.
4. When the shoulder width is greater than 12 feet, steady-burn lights may be omitted if drums are used.
5. Drums must extend the length of the culvert widening.

LEGEND

	Plastic drum
	Plastic drum with steady burn light or yellow warning reflector
	Steady burn warning light or yellow warning reflector



CONES

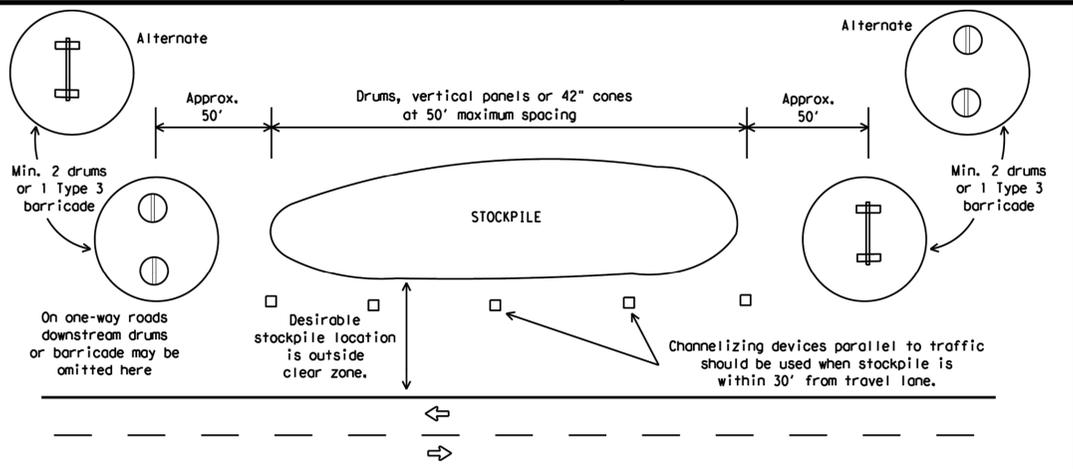
Two-Piece cones

One-Piece cones

Tubular Marker

28" Cones shall have a minimum weight of 9 1/2 lbs.
42" 2-piece cones shall have a minimum weight of 30 lbs. including base.

1. Traffic cones and tubular markers shall be predominantly orange, and meet the height and weight requirements shown above.
2. One-piece cones have the body and base of the cone molded in one consolidated unit. Two-piece cones have a cone shaped body and a separate rubber base, or ballast, that is added to keep the device upright and in place.
3. Two-piece cones may have a handle or loop extending up to 8" above the minimum height shown, in order to aid in retrieving the device.
4. Cones or tubular markers shall have white or white and orange reflective bands as shown above. The reflective bands shall have a smooth, sealed outer surface and meet the requirements of Departmental Material Specification DMS-8300 Type A or Type B.
5. 28" cones and tubular markers are generally suitable for short duration and short-term stationary work as defined on BC(4). These should not be used for intermediate-term or long-term stationary work unless personnel is on-site to maintain them in their proper upright position.
6. 42" two-piece cones, vertical panels or drums are suitable for all work zone durations.
7. Cones or tubular markers used on each project should be of the same size and shape.



TRAFFIC CONTROL FOR MATERIAL STOCKPILES

SHEET 10 OF 12

Texas Department of Transportation
Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION CHANNELIZING DEVICES

BC(10)-21

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CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

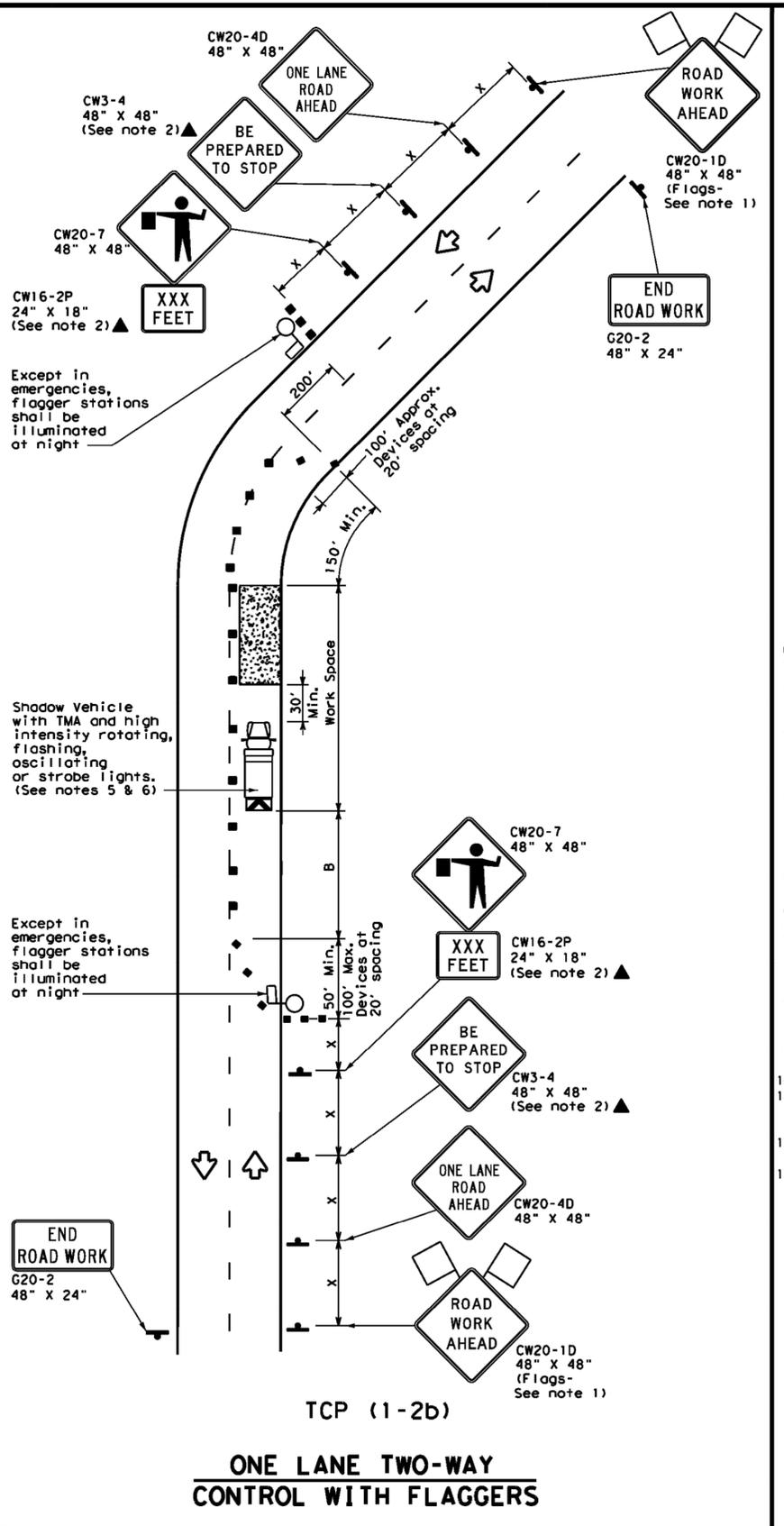
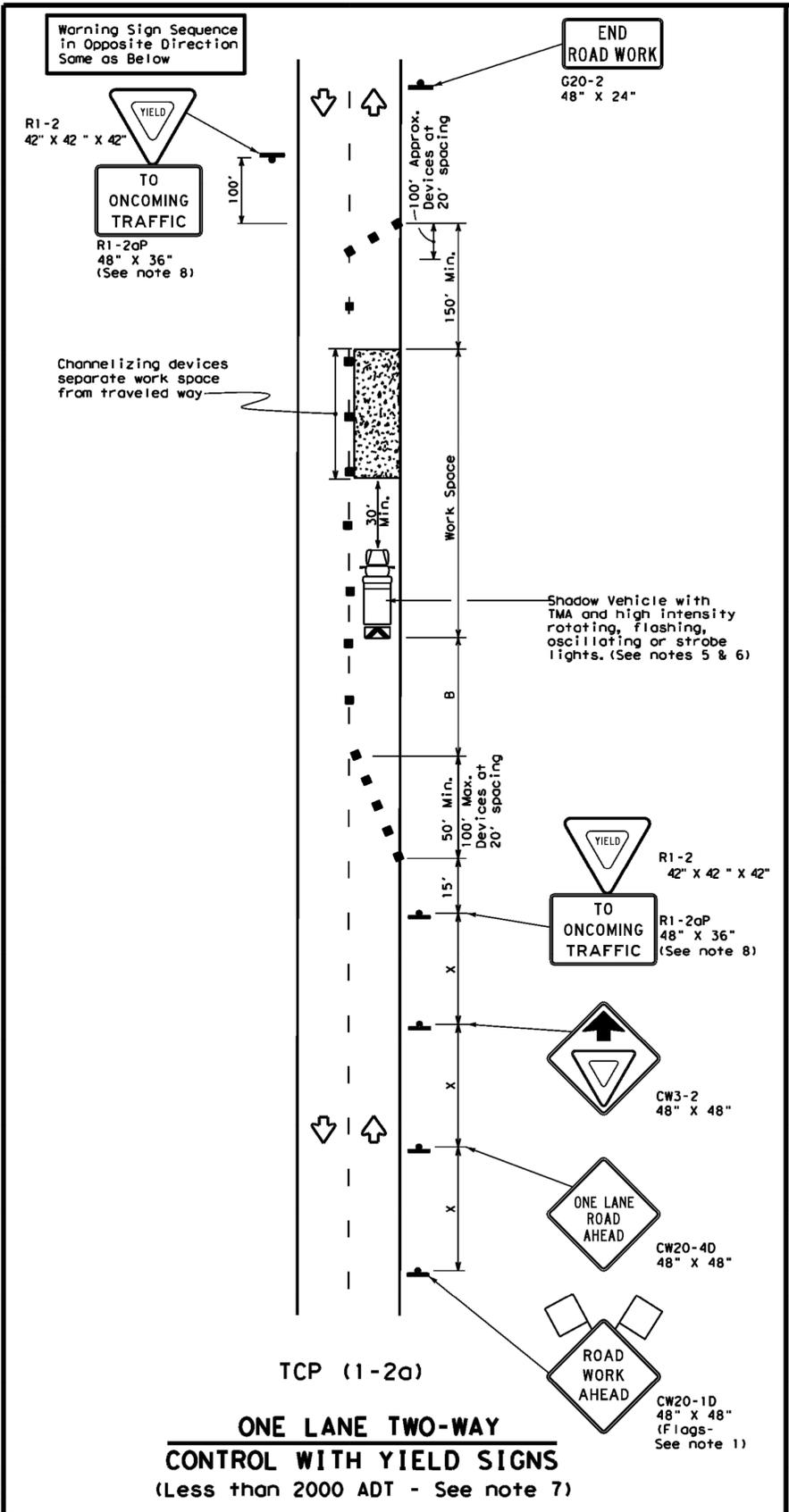
BARRICADE AND CONSTRUCTION CHANNELIZING DEVICES

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SCALE: N/A DRAWN BY: AA
DATE: 12/04/23 SHEET No.: 89 OF 101
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LEGEND			
	Type 3 Barricade		Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board		Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed *	Formula	Minimum Desirable Taper Lengths **			Suggested Maximum Spacing of Channelizing Devices		Minimum Sign Spacing "x" Distance	Suggested Longitudinal Buffer Space "B"	Stopping Sight Distance
		10' Offset	11' Offset	12' Offset	On a Taper	On a Tangent			
30	L = WS ² / 60	150'	165'	180'	30'	60'	120'	90'	200'
35		205'	225'	245'	35'	70'	160'	120'	250'
40		265'	295'	320'	40'	80'	240'	155'	305'
45	L = WS	450'	495'	540'	45'	90'	320'	195'	360'
50		500'	550'	600'	50'	100'	400'	240'	425'
55		550'	605'	660'	55'	110'	500'	295'	495'
60		600'	660'	720'	60'	120'	600'	350'	570'
65		650'	715'	780'	65'	130'	700'	410'	645'
70		700'	770'	840'	70'	140'	800'	475'	730'
75		750'	825'	900'	75'	150'	900'	540'	820'

* Conventional Roads Only
 ** Taper lengths have been rounded off.
 L=Length of Taper (FT) W=Width of Offset (FT) S=Posted Speed (MPH)

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
	✓	✓		

GENERAL NOTES

- Flags attached to signs where shown are REQUIRED.
 - All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol may be omitted when stated elsewhere in the plans, or for routine maintenance work, when approved by the Engineer.
 - The CW3-4 "BE PREPARED TO STOP" sign may be installed after the CW20-4D "ONE LANE ROAD AHEAD" sign, but proper sign spacing shall be maintained.
 - Sign spacing may be increased or an additional CW20-1D "ROAD WORK AHEAD" sign may be used if advance warning ahead of the flagger or R1-2 "YIELD" sign is less than 1500 feet.
 - A Shadow Vehicle with a TMA should be used anytime it can be positioned 30 to 100 feet in advance of the area of crew exposure without adversely affecting the performance or quality of the work. If workers are no longer present but road or work conditions require the traffic control to remain in place, Type 3 Barricades or other channelizing devices may be substituted for the Shadow Vehicle and TMA.
 - Additional Shadow Vehicles with TMAs may be positioned off the paved surface, next to those shown in order to protect wider work spaces.
- TCP (1-2a)**
- R1-2 "YIELD" sign traffic control may be used on projects with approaches that have adequate sight distance. For projects in urban areas, work spaces should be no longer than one half city block. In rural areas on roadways with less than 2000 ADT, work spaces should be no longer than 400 feet.
 - R1-2 "YIELD" sign with R1-2aP "TO ONCOMING TRAFFIC" plaque shall be placed on a support at a 7 foot minimum mounting height.
- TCP (1-2b)**
- Flaggers should use two-way radios or other methods of communication to control traffic.
 - Length of work space should be based on the ability of flaggers to communicate.
 - If the work space is located near a horizontal or vertical curve, the buffer distances should be increased in order to maintain adequate stopping sight distance to the flagger and a queue of stopped vehicles (see table above).
 - Channelizing devices on the center-line may be omitted when a pilot car is leading traffic and approved by the Engineer.
 - Flaggers should use 24" STOP/SLOW paddles to control traffic. Flags should be limited to emergency situations.

TRAFFIC CONTROL PLAN ONE-LANE TWO-WAY TRAFFIC CONTROL TCP (1-2) - 18			
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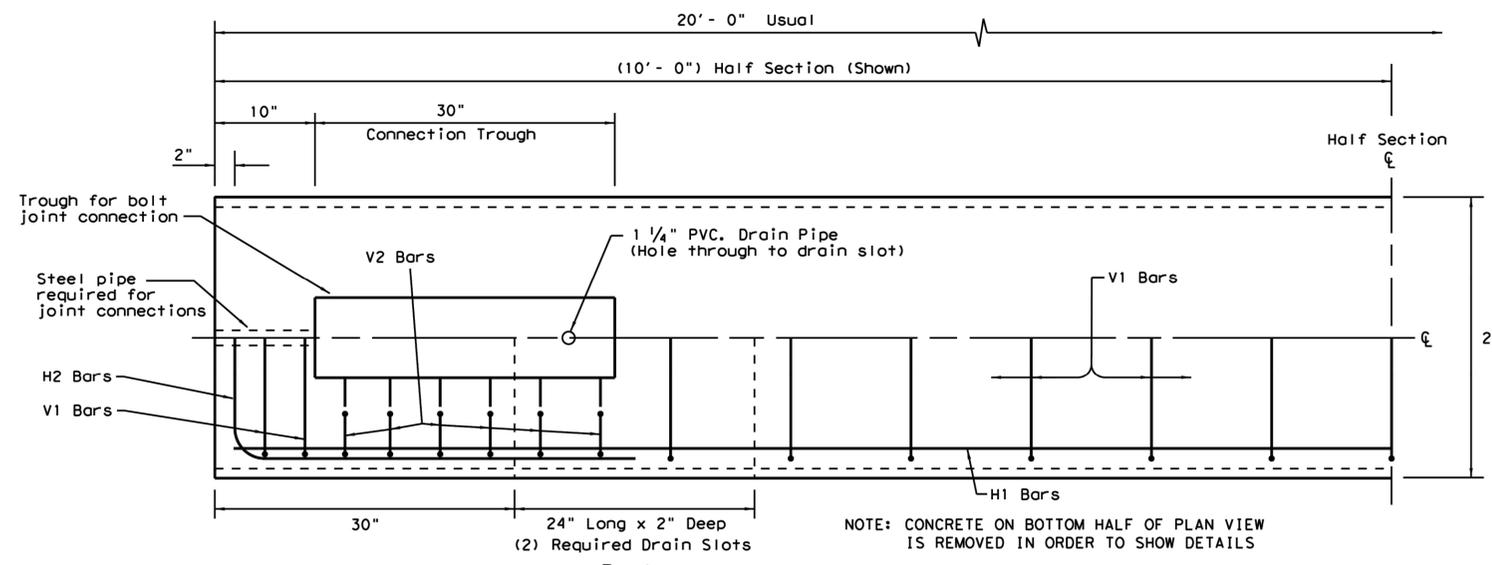
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BRIGHTON PLACE RECONSTRUCTION

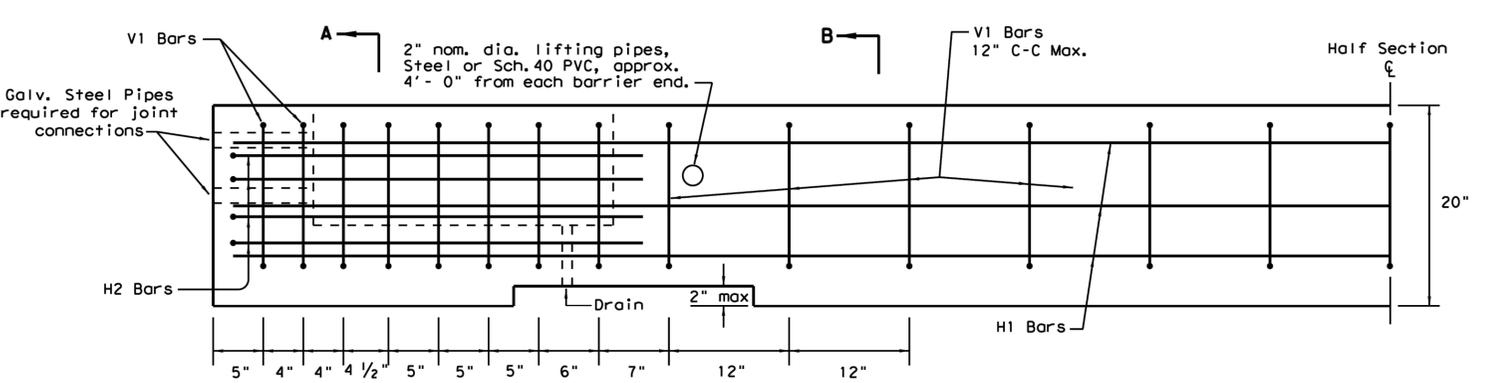
TRAFFIC CONTROL PLAN
 ONE-LANE TWO-WAY
 TRAFFIC CONTROL TCP (1-2) - 18

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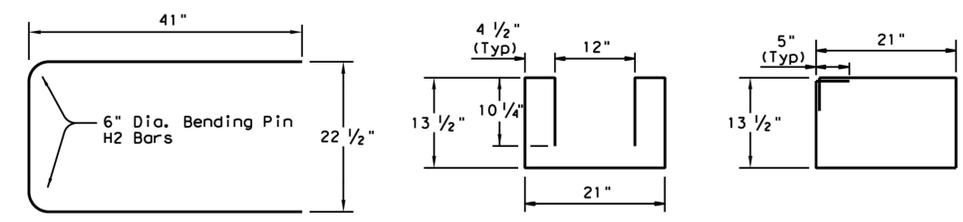
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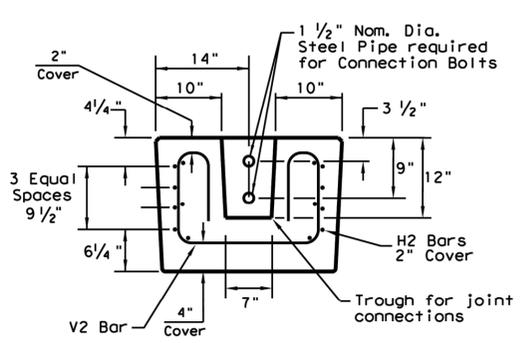
PLAN
(TYPE 1) BARRIER SEGMENT
(SYMMETRICAL ABOUT CENTER LINES)



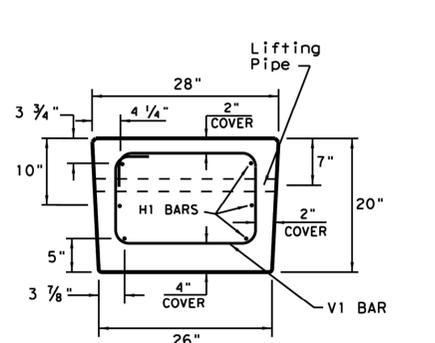
ELEVATION
(TYPE 1) BARRIER SEGMENT
(SYMMETRICAL ABOUT CENTER LINES)



REINFORCING STEEL DETAILS
TYPE 1 - BARRIER SEGMENT
Note: Use 2" Dia. Bending Pin, unless otherwise shown



SECTION A-A



SECTION B-B

- GENERAL NOTES**
1. Low Profile Concrete Barrier (LPCB), is approved for use in temporary work zone locations, where the posted speed is 45 mph, or less.
 2. Concrete shall be Class H for precast barrier with a minimum compressive strength of 3,600 psi.
 3. Where used, rebar reinforcement shall be Grade 60 and conform to ASTM A615.
 4. Precast LPCB barrier length shall be 20 ft.
 5. All barrier edges shall have 3/4" chamfer or a toolled radius.
 6. Joint connection hardware shall be in accordance with Item 449, "Anchor Bolts," and is considered subsidiary.
 7. Steel pipe required for joint connection bolts shall be galvanized in accordance with Item 445, "Galvanizing."
 8. Welded wire reinforcement (WWR) may be used in lieu of conventional reinforcement for Type 1 barrier, and shall meet the requirements shown.

FOR CONTRACTORS INFORMATION ONLY

(TYPE 1) APPROX. QUANTITIES 20 FT. SECTION		
CONCRETE	CY	2.6
REINFORCING STEEL	LBS	330
TOTAL BARRIER WT.	LBS	11000

(WWR) GENERAL NOTES

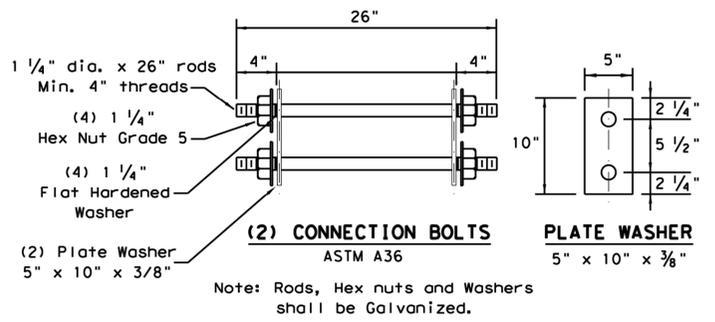
1. Deformed Welded Wire Reinforcement shall conform to ASTM A497.
2. Welded wire cage may be cut or bent, if necessary, but must be approved by the Engineer.
3. Combinations of reinforcing steel and WWR are permitted, as directed by the Engineer. The dimensions from the end of the barrier section to the first wire shall not exceed 3".

REQUIRED (WWR) WIRE DESIGN

- 8 ~ (D31) Horizontal Wires (Equally spaced)
- 10 ~ (D20) Horizontal Wires (Equally spaced)
- 29 ~ (D20) Vertical Wires (Spaced as shown in Elevation View)

SECTION A-A **SECTION B-B**

WELDED WIRE REINFORCEMENT (WWR) - OPTIONAL REINFORCING



SHEET 1 OF 2

Texas Department of Transportation
Design Division Standard

LOW PROFILE CONCRETE BARRIER PRECAST BARRIER (TYPE 1) LPCB-13

FILE: lpcb13.dgn	DN: TxDOT	CK: AM	DW: VP	CK:
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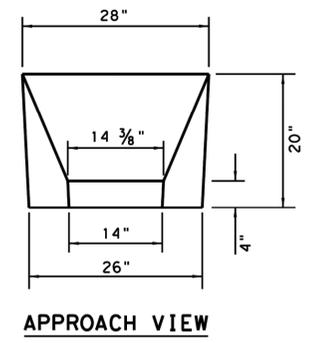
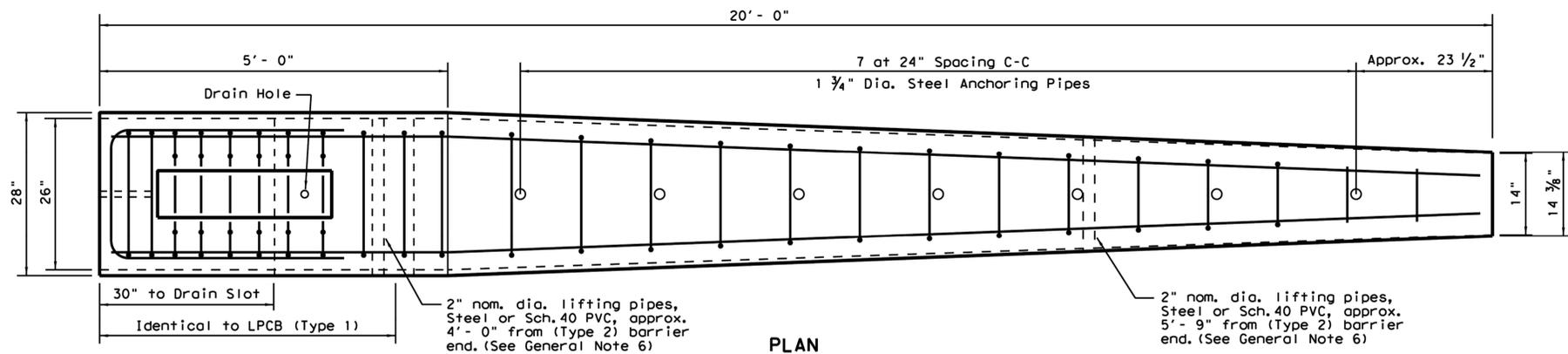
BRIGHTON PLACE RECONSTRUCTION

LOW PROFILE CONCRETE BARRIER PRECAST BARRIER (TYPE 1) LPCB-13

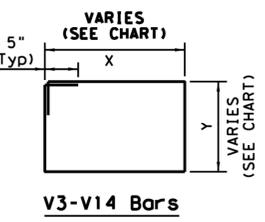
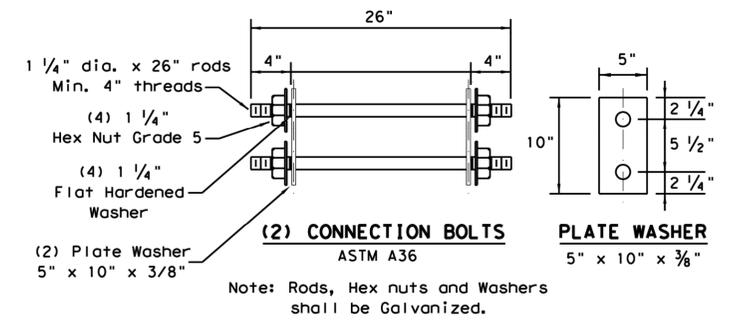
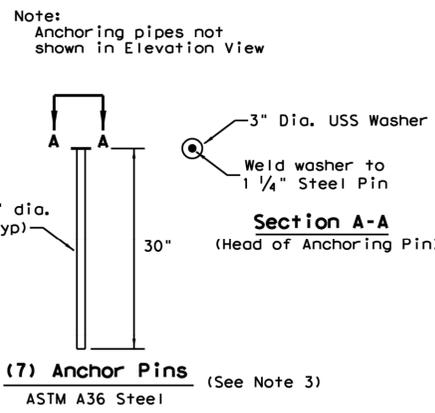
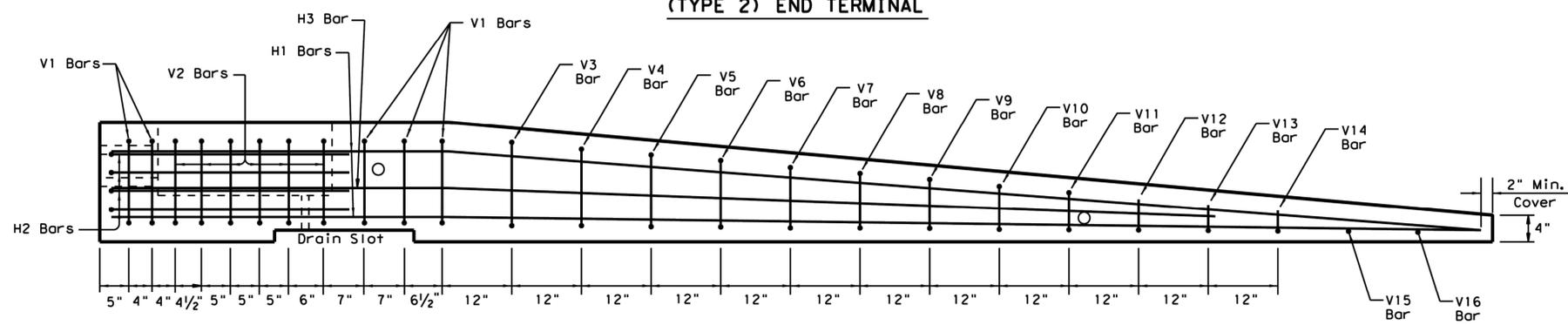
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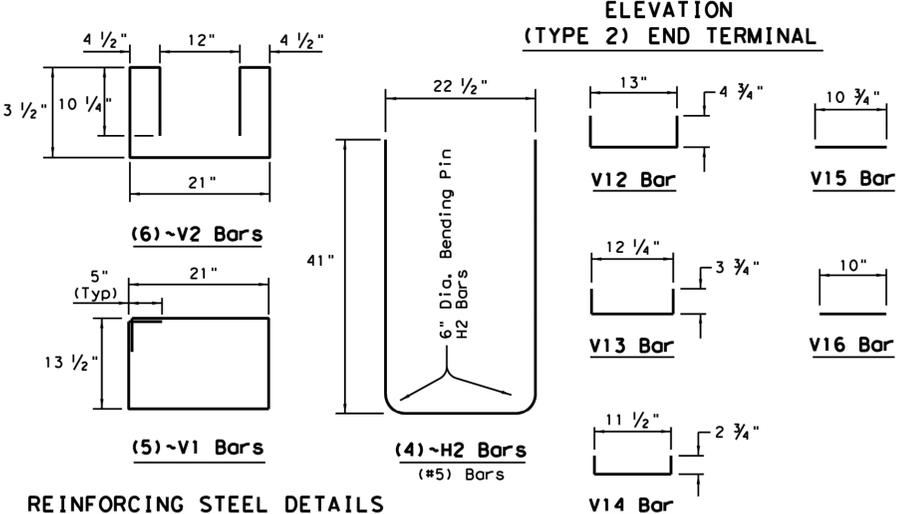
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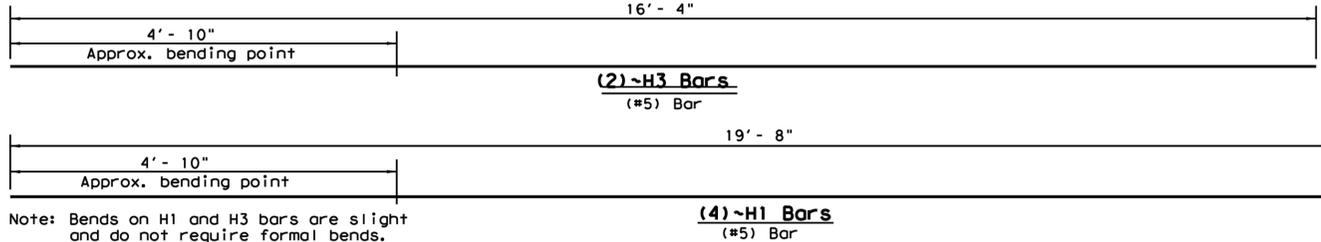
- TYPE 2 - NOTES**
1. Welded wire reinforcement (WWR) is "not" an option for Type 2 Barrier.
 2. Type 2 Barrier shall be used as an end treatment for the Type 1 barrier segments, when applicable.
 3. The end treatment can be used without the anchor pins in locations that can accommodate approximately 4 ft. of lateral displacement of the end treatment. The use of non-pinned end treatment does not affect the performance or the deflection of the Low-Profile barrier system.
 4. The anchor pins are all the same length and are to be driven flush with the top of the (Type 2) barrier surface.
 5. The bends in the H3 and H1 bars are slight, no formal bend is necessary.
 6. The Type 2 barrier segment must be lifted from the rear first, to prevent cracking of sloped section.
 7. See LPCB sheet 1 for additional information.



BAR (#4)	X (IN.)	Y (IN.)
V3 BAR	20 1/4	14 1/2
V4 BAR	19 1/2	13 1/2
V5 BAR	18 1/2	12 1/4
V6 BAR	17 1/2	11 1/4
V7 BAR	17	10 1/4
V8 BAR	16 1/4	9
V9 BAR	15 1/2	8
V10 BAR	14 1/2	7
V11 BAR	13 3/4	6



Note: Use 2" Dia. Bending Pin, unless otherwise shown



Note: Bends on H1 and H3 bars are slight and do not require formal bends.

FOR CONTRACTORS INFORMATION ONLY

(TYPE 2) APPROX. QUANTITIES 20 FT. SECTION		
CONCRETE	CY	1.65
REINFORCING STEEL	LBS	240
TOTAL BARRIER WT.	LBS	7000

SHEET 2 OF 2

Texas Department of Transportation
Design Division Standard

LOW PROFILE CONCRETE BARRIER PRECAST BARRIER (TYPE 2) LPCB-13

FILES: lpcb13.dgn
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CK: AM
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CITY OF SPRING VALLEY VILLAGE

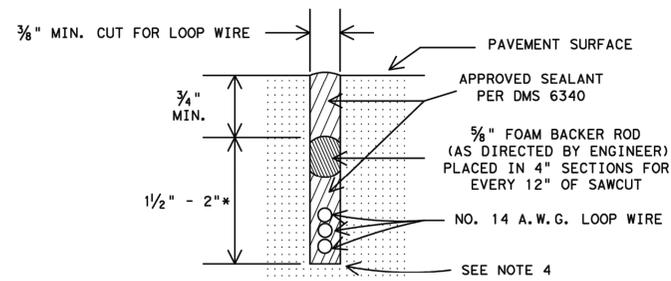
BRIGHTON PLACE RECONSTRUCTION

LOW PROFILE CONCRETE BARRIER PRECAST BARRIER (TYPE 2) LPCB-13

SUBMITTED: 12/04/23	DESIGNED BY: JMS
SCALE: N/A	DRAWN BY: AA
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SURVEY BY: CFA	DWG. No:
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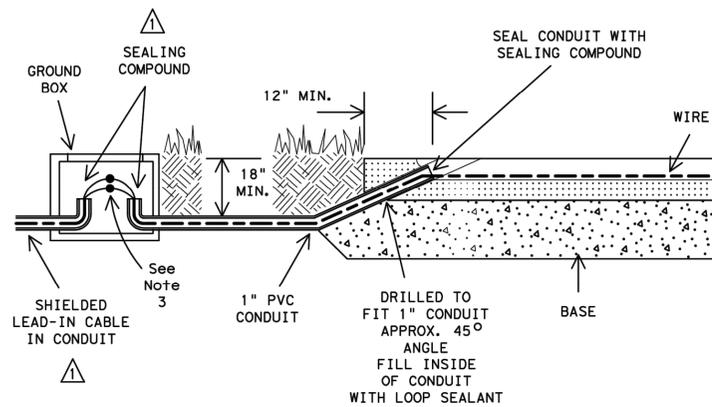
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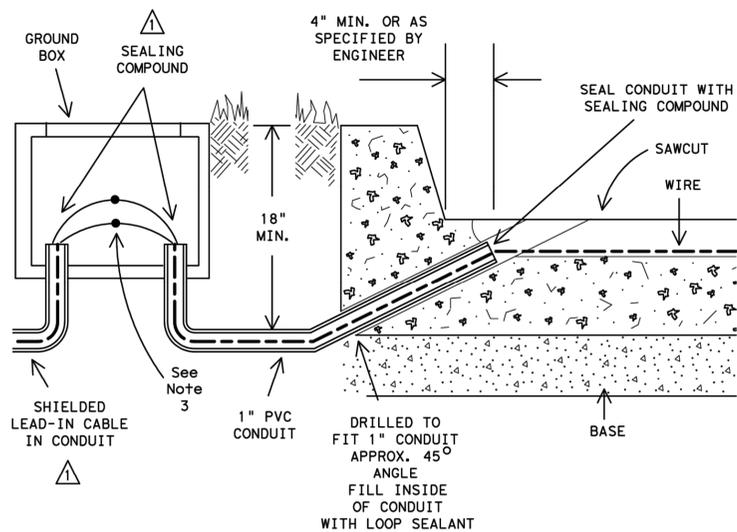


LOOP SAW CUT CROSS-SECTION

* SAWCUTS IN BRIDGE DECKS ARE TYPICALLY 1" DEPTH MAXIMUM
SAWCUTS IN BRIDGE DECKS AND ACROSS EXPANSION JOINTS SHALL BE AS APPROVED BY ENGINEER



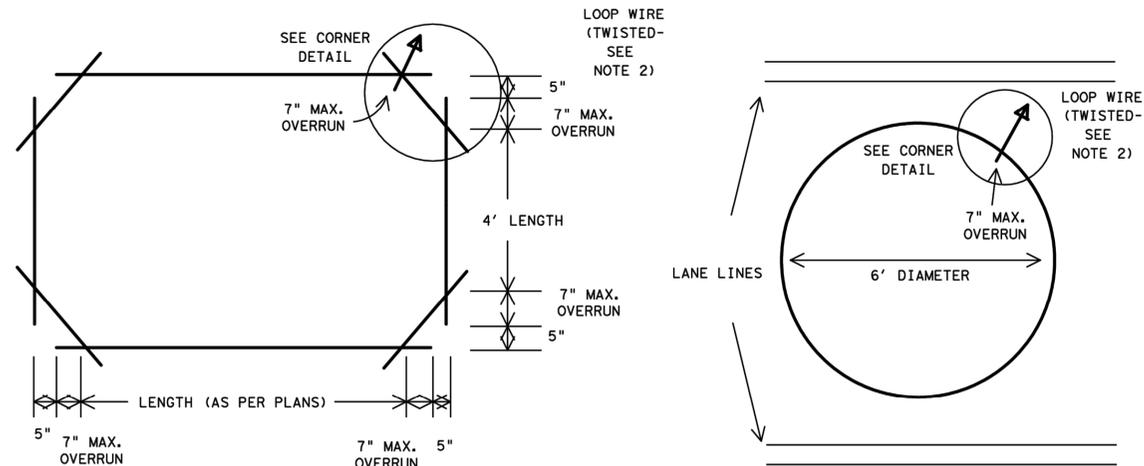
TYPICAL LEAD IN CONFIGURATION (WITHOUT CURBING)



TYPICAL LEAD IN CONFIGURATION (WITH CURBING)

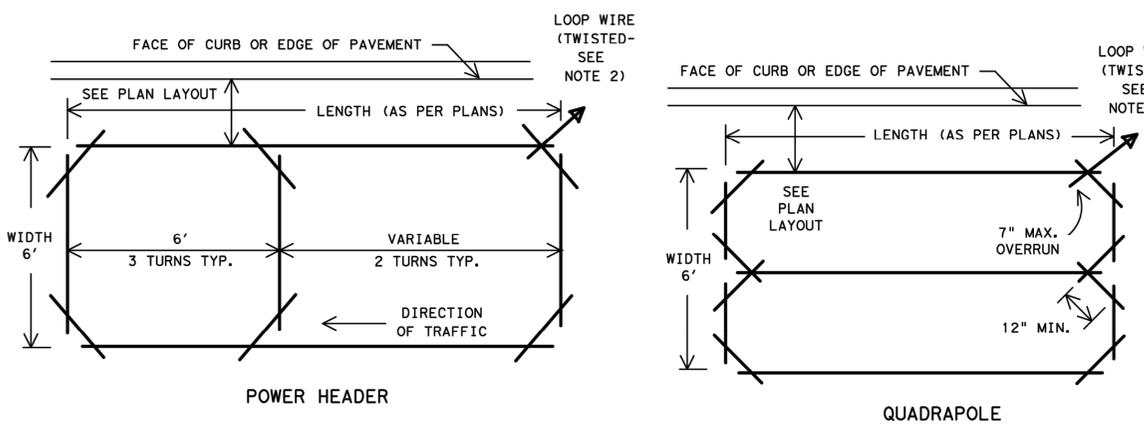
TYPICAL LOOP DETECTOR LAYOUTS

(AS SPECIFIED IN PLANS)



RECTANGULAR

CIRCULAR



GENERAL NOTES:

- The pavement cut is to be made with a concrete saw to neat lines and loose material removed. The cut shall be clean and dry when the wire and sealing compound is placed.
- Loop wire shall be 14 AWG Stranded Type XHHW. Wire from the loop to the ground box shall be twisted a minimum of 5 turns per foot. No splices shall be permitted in the loop or in the run to the ground box.
- The home run cable from the pull box to the controller shall be IMSA 50-2 shielded cable and shall be soldered to the loop wire. The solder joints shall be sealed with Scotchcast or other method acceptable to the Engineer. The shield shall be grounded only at the controller end. Loop home run cable shall be two conductor 14 AWG shielded, Type XHHW.
- All wire placed in the saw cut shall be sealed by fully encapsulating it in a sealant acceptable to the Engineer. Sealing compound shall be in accordance with DMS 6340.
- The loop location, configuration and number of turns shall be as indicated on the plans or as directed by the Engineer.

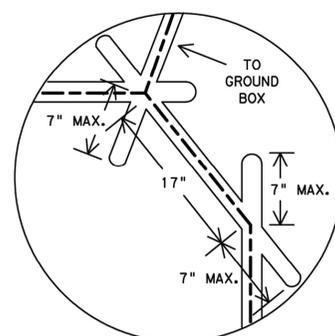
Recommended Number of Turns for Loop Detectors

LOOP PERIMETER SIZE (FT.)	NUMBER OF TURNS	APPROXIMATE LOOP SIZES INCLUDED
24' or Less	3 or 4	5' x 5', 6' x 6'
25' - 110'	2 or 3	6' x 10', 6' x 45'
110' or More	1 or 2	6' x 50' or Longer

- A separate saw cut shall be made from each loop to the edge of pavement or as specified by the Engineer.
- Splices between the loop lead-in cable and loop detector shall be made only in the ground box near the loop it is serving.
- Circular loops may use prewound loops encased in continuous pvc tubing. Sawcut width may be adjusted to accommodate tubing.
- The lead-in wire in the circular loop shall be coiled at the 3 inch drilled corner to reduce bending stress.
- Loop duct may be used as specified by Engineer.

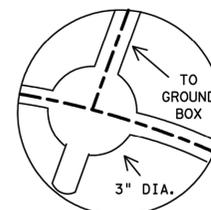
For additional information refer to "Texas Traffic Signal Detector" manual, TTI Report 1163-1.

TYPICAL CORNER DETAILS

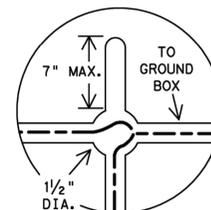


RECTANGULAR & HEXIGON LOOP SAWCUT CORNER DETAIL

7" OVERRUN BASED ON 24" DIAMETER SAW BLADE



CIRCULAR LOOP DRILLED CORNER DETAIL



RECTANGULAR & HEXIGON LOOP (ALT.) DRILLED CORNER DETAIL

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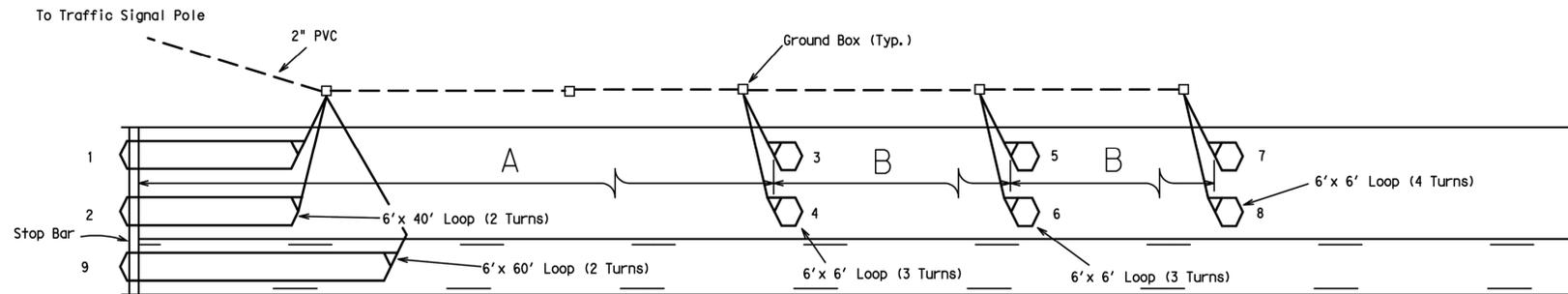
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CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

LOOP DETECTOR
 PLACEMENT DETAILS
 LD (1) - 03

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SCALE: N/A	DRAWN BY: AA
DATE: 12/04/23	SHEET No.: 93 OF 101
SURVEY BY: CFA	DWG. No.:
F B No.:	-



55 MPH (A=225', B=95') 60 MPH (A=275', B=100')
 65 MPH (A=320', B=110') 70 MPH (A=350', B=125')

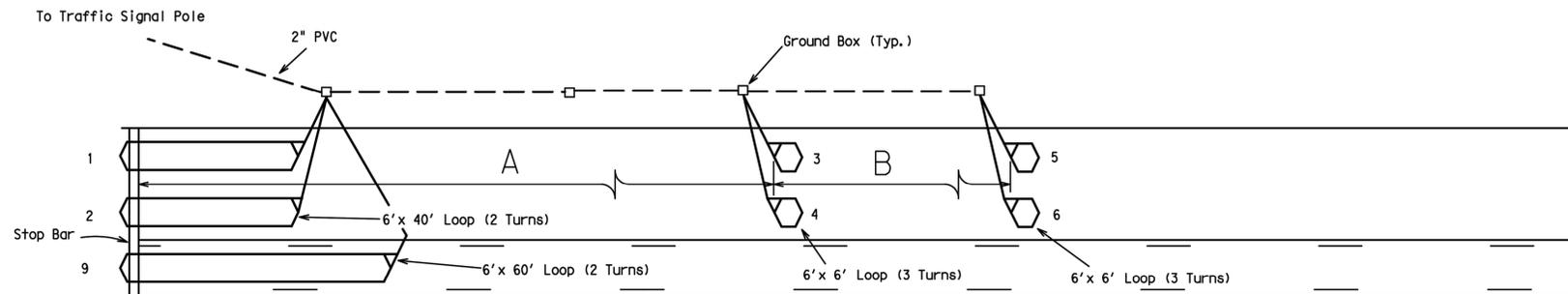
GENERAL NOTES:

Loops 1 and 2 shall be connected to the controller cabinet by means of the same loop lead-in (2/C #14 AWG).

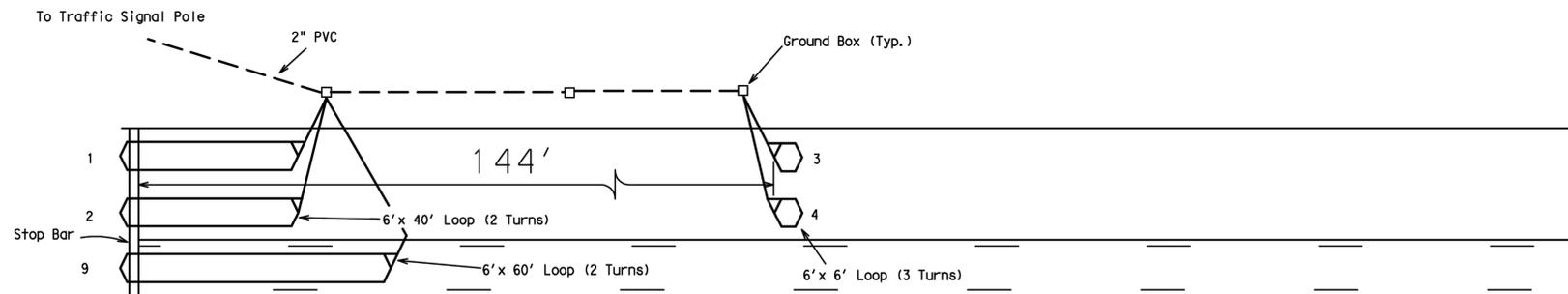
Loops 3 thru 6 shall be connected to the controller cabinet by means of the same loop lead-in (2/C #14 AWG).

Loops 7 and 8 shall be connected to the controller cabinet by means of the same loop lead-in (2/C #14 AWG).

Loop 9 shall be connected to the controller cabinet by means of a loop lead-in (2/C #14 AWG). Loop 9 shall be placed only when a left turn lane exists.

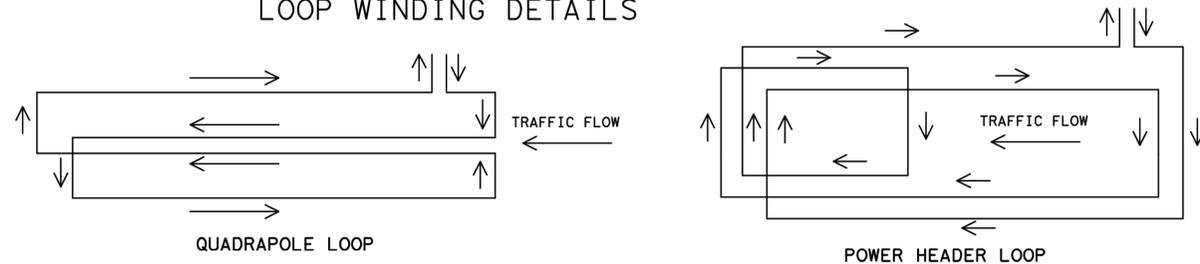


35 MPH (A=90', B=100') 40 MPH (A=110', B=130')
 45 MPH (A=175', B=115') 50 MPH (A=220', B=130')



30 MPH

LOOP WINDING DETAILS



Texas Department of Transportation
 Traffic Operations Division

**LOOP DETECTOR
 PLACEMENT DETAILS**

LD(2)-03

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CITY OF SPRING VALLEY VILLAGE

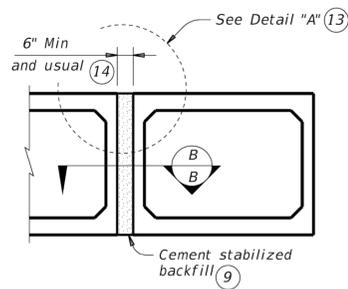
BRIGHTON PLACE RECONSTRUCTION

LOOP DETECTOR
 PLACEMENT DETAILS
 LD (2) - 03

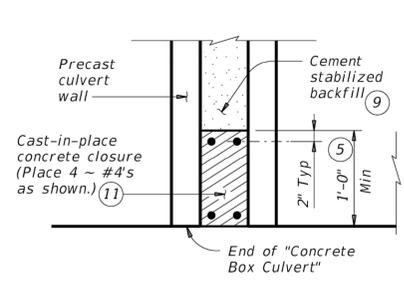
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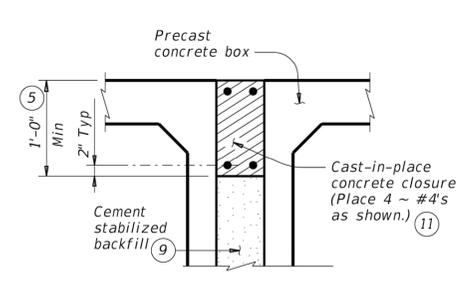
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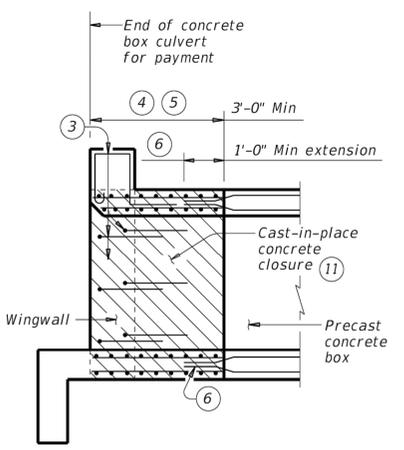
MULTIPLE UNIT PLACEMENT



SECTION B-B

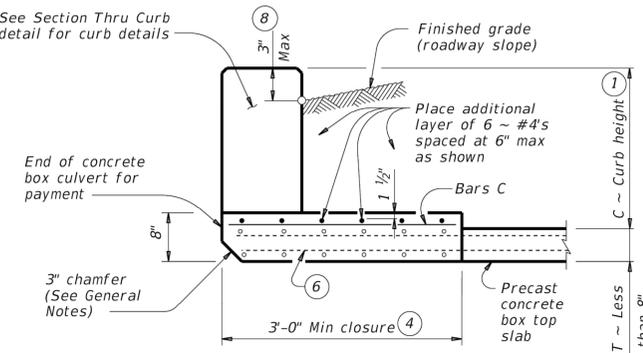


DETAIL "A"

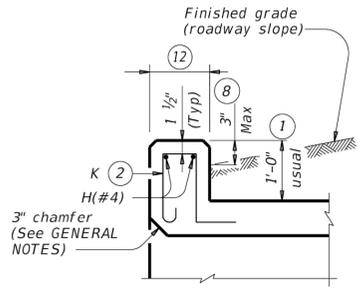


WINGWALL CONNECTION

(Also applies to safety end treatment.)

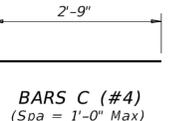


SECTION THRU TOP SLABS LESS THAN 8"

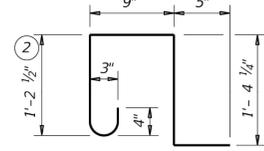


SECTION THRU CURB

QUANTITIES PER FOOT OF CURB (10)	
Reinforcing Steel	4.12 Lb
Concrete	0.037 CY



BARS C (#4)
(Spa = 1'-0" Max)



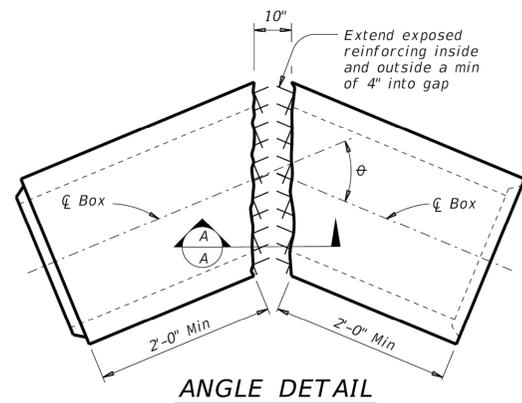
BARS K (#4)
(Spa = 1'-0" Max)
(Length = 4'-2")

- 1 0" Min to 5'-0" Max. Estimated curb heights are shown elsewhere in the plans. For structures with pedestrian rail, bicycle rail, or curbs taller than 1'-0", refer to the Extended Curb Details (ECD) standard sheet. For structures with T631 or T631LS bridge rail, refer to the Mounting Details for T631 & T631LS Rails (T631-CM) standard sheet. Refer to the Box Culvert Rail Mounting Details (RAC) standard sheet for structures with bridge rail other than T631 or T631LS.
- 2 For curbs less than 1'-0" high, tilt Bars K or reduce bar height as necessary to maintain cover. For curbs less than 3" high, Bars K may be omitted.
- 3 Extend curb, wingwall, or safety end treatment reinforcing into concrete closure. Bend or trim, as necessary, any reinforcing that does not fit into closure area.
- 4 Provide a 3'-0" Min cast-in-place concrete closure. Break back boxes in the field or cast boxes short. Provide bands of reinforcing in the closure that are the same size and spacing as in the precast box section. Provide #4 longitudinal reinforcement spaced at 12 inches Max within the closure. Except where shown otherwise, construct the cast-in-place closure flush with the inside and outside faces of the precast box section.
- 5 For multiple unit placements, adjust the length of the closure for the interior walls as necessary. Provide a 3'-0" Min cast-in-place closure in the top slab, bottom slab, and exterior wall. See Section B-B detail when interior walls are cast full length.
- 6 Extend precast box reinforcing a minimum of 1'-0" into concrete closure (Typ).
- 7 Place bands of reinforcing matching the inside and outside face reinforcing in the gaps of the top and bottom slabs. Place a band matching the outside face reinforcing of the wall in the gaps of the walls (placed in the outside face only). Tack weld the bands to the exposed reinforcing at each point of contact.
- 8 For vehicle safety, the following requirements must be met:
 - For structures without bridge rail, construct curbs no more than 3" above finished grade.
 - For structures with bridge rail, construct curbs flush with finished grade. Reduce curb heights, if necessary, to meet the above requirements. No changes will be made in quantities and no additional compensation will be allowed for this work.
- 9 Cement stabilized backfill between boxes is considered part of the box culvert for payment.
- 10 All curb concrete and reinforcing is considered part of the box culvert for payment.
- 11 Any additional concrete and reinforcing required for the closures will be considered subsidiary to the box culvert for payment.
- 12 1'-0" typical. 2'-3" when the Box Culvert Rail Mounting Details (RAC) standard sheet is referred to elsewhere in the plans.
- 13 For multiple unit placement with overlay, with 1 to 2 course surface treatment, or with the top slab as the final riding surface, provide wall closure as shown in Detail "A".
- 14 This dimension may be increased with approval of the Engineer to allow the precast boxes to be tunneled or jacked in accordance with Item 476, "Jacking, Boring, or Tunneling Pipe or Box." No payment will be made for any additional material in the gap between adjacent boxes.

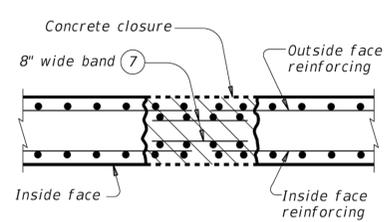
MATERIAL NOTES:
 Provide Grade 60 reinforcing steel.
 Provide ASTM A1064 welded wire reinforcement.
 Provide Class C concrete (f'c = 3,600 psi) for the closures.
 Provide cement stabilized backfill meeting the requirements of Item 400, "Excavation and Backfill for Structures."
 Any additional concrete required for the closures will be considered subsidiary to the box culvert.

GENERAL NOTES:
 Designed according to AASHTO LRFD Bridge Design Specifications.
 Refer to the Single Box Culverts Precast (SCP) standard sheets for details and notes not shown.
 Chamfer the bottom edge of the top slab closure 3 inches at culvert closure ends.

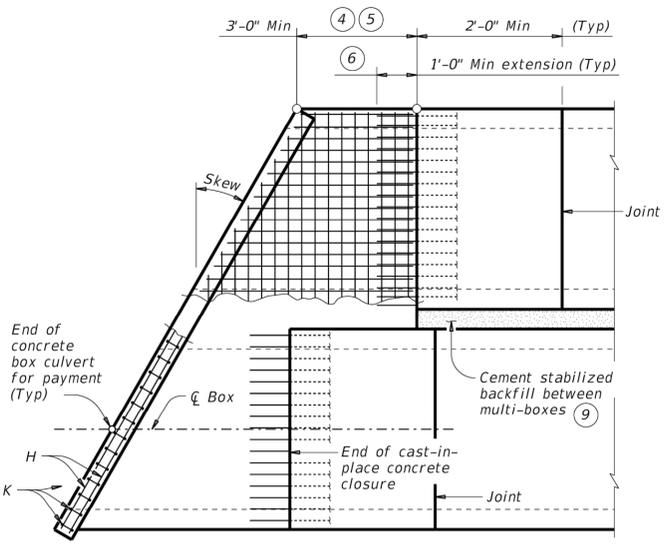
Cover dimensions are clear dimensions, unless noted otherwise.
 Reinforcing bars dimensions are out-to-out of bars.



ANGLE DETAIL



SECTION A-A



PLAN OF SKEWED ENDS

(Showing multi-box placement.)

HL93 LOADING

Texas Department of Transportation Bridge Division Standard

BOX CULVERTS PRECAST MISCELLANEOUS DETAILS

SCP-MD

FILE: CD-SCP-MD-20.dgn	DN: GAF	CK: LMW	DW: BWH/TxDOT	CK: GAF
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CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

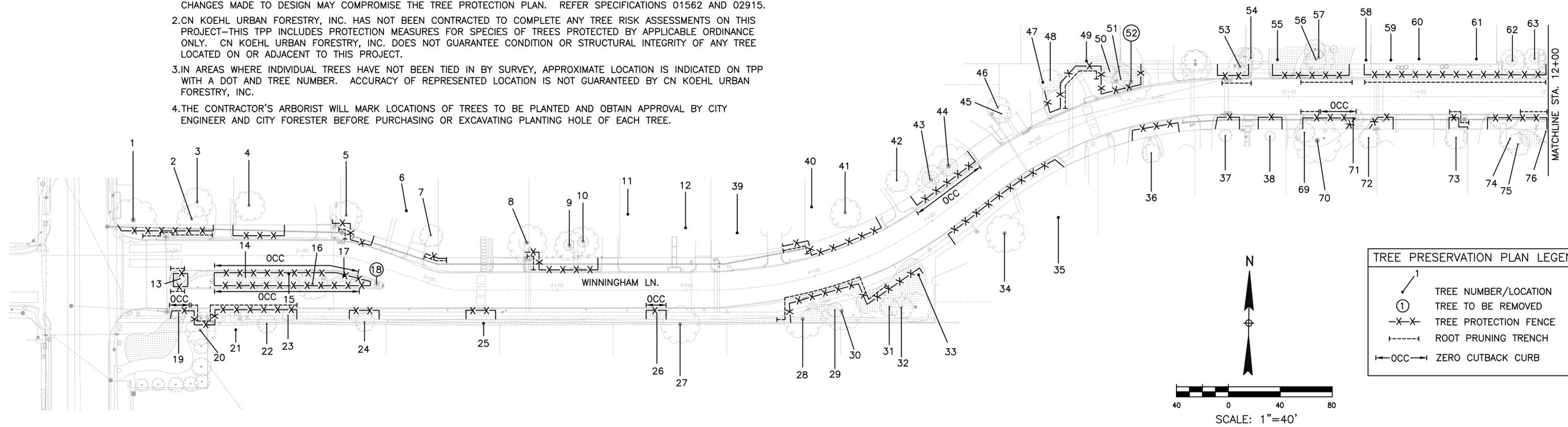
BOX CULVERTS PRECAST MISCELLANEOUS DETAILS

SUBMITTED: 12/04/23	DESIGNED BY: JMS
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NOTE:

1. THIS TREE PROTECTION PLAN WAS DEVELOPED WITH INFORMATION PROVIDED BY DESIGN ENGINEER IN DRAWINGS DATED JULY 2023. THE PLAN CONSIDERS ALL FITTINGS, VERTICAL OFFSETS AND AREAS OF NECESSARY EXCAVATION. CHANGES MADE TO DESIGN MAY COMPROMISE THE TREE PROTECTION PLAN. REFER SPECIFICATIONS 01562 AND 02915.
2. CN KOEHL URBAN FORESTRY, INC. HAS NOT BEEN CONTRACTED TO COMPLETE ANY TREE RISK ASSESSMENTS ON THIS PROJECT—THIS TPP INCLUDES PROTECTION MEASURES FOR SPECIES OF TREES PROTECTED BY APPLICABLE ORDINANCE ONLY. CN KOEHL URBAN FORESTRY, INC. DOES NOT GUARANTEE CONDITION OR STRUCTURAL INTEGRITY OF ANY TREE LOCATED ON OR ADJACENT TO THIS PROJECT.
3. IN AREAS WHERE INDIVIDUAL TREES HAVE NOT BEEN TIED IN BY SURVEY, APPROXIMATE LOCATION IS INDICATED ON TPP WITH A DOT AND TREE NUMBER. ACCURACY OF REPRESENTED LOCATION IS NOT GUARANTEED BY CN KOEHL URBAN FORESTRY, INC.
4. THE CONTRACTOR'S ARBORIST WILL MARK LOCATIONS OF TREES TO BE PLANTED AND OBTAIN APPROVAL BY CITY ENGINEER AND CITY FORESTER BEFORE PURCHASING OR EXCAVATING PLANTING HOLE OF EACH TREE.



Tree No.	Location	Description	Comments	Treatment
Trees on Winningham Lane				
1	8468 Winningham	34" Water Oak	Private tree	Root prune for street, Fence, Clearance prune
2	8468 Winningham	21" Pine	Private tree	Root prune for street, Fence
3	8468 Winningham	31" Willow Oak	Private tree	Root prune for street, Fence
4	8464 Winningham	28" Live Oak	Private tree	Fence
5	8460 Winningham	19" Live Oak	Private tree	Root prune for manhole, Fence, Clearance prune
6	8460 Winningham	17" Magnolia	Private tree, not impacted	
7	8460 Winningham	15" Pine	Thin canopy, Private tree	Root prune for sanitary, Fence
8	8456 Winningham	28" Pine	Thin canopy, Private tree	Root prune for water service lead, Fence
9	8452 Winningham	33" Water Oak	Private tree	Fence
10	8452 Winningham	25" Water Oak	Private tree	Fence
11	8448 Winningham	26" Pine	Private tree, not impacted	
12	8448 Winningham	23" Live Oak	Private tree, not impacted	
13	Median	9" Holly		Root prune for street, Fence, Clearance prune
14	Median	14" Shumard Oak	Memorial Tree	Zero Curb Cutback, Fence, Clearance prune
15	Median	5" Crepe Myrtle	Topped	Zero Curb Cutback, Fence
16	Median	22" Pine	Thin canopy	Zero Curb Cutback, Fence
17	Median	8" Crepe Myrtle	Topped	Zero Curb Cutback, Fence
18	Median	15" Crepe Myrtle	Remove for street widening	Remove tree
19	Not available	11" Holly		Bore waterline, Zero Curb Cutback, Fence, Clearance prune
20	Not available	22" Baldcypress	Topped by CenterPoint	Root prune for water tap&lead, Root prune for street, Fence, Bore waterline
21	Not available	20" American Elm	Pruned by CPE, Private tree	Bore waterline, Root prune for street, Fence, Clearance prune
22	Not available	17" Sugarberry	Pruned by CPE, Private tree	Root prune for street, Bore waterline, Fence
23	Not available	10" Holly		Bore waterline, Root prune for street, Fence, Clearance prune
24	Not available	12" Ligustrum	30% dieback	Fence, Bore waterline
25	Not available	16" Tallow	Topped by CenterPoint	Fence, Bore waterline, Clearance prune
26	Not available	8" Holly	Suppressed, 50% dieback	Zero Curb Cutback, Fence, Bore waterline, Clearance prune
27	Not available	27" Water Oak	Trunk decay, Structurally compromised, Private tree, Owner should have tree removed	
28	Not available	24" Water Oak	Pruned by CPE	Root prune for water tap&lead, Root prune for street, Fence, Bore waterline
29	Not available	11" Water Oak	Suppressed	Fence, Bore waterline
30	Not available	26" Water Oak	Pruned by CPE	Bore waterline, Root prune for street, Fence
31	Not available	14" Water Oak	Pruned by CPE	Root prune for waterline, Fence
32	Not available	19" Water Oak	Pruned by CPE	Root prune for waterline, Fence
33	Not available	5" Crepe Myrtle	Topped	Fence
34	8441 Winningham	33" Water Oak	Private tree	Fence, Bore waterline

Tree No.	Location	Description	Comments	Treatment
Trees on Winningham Lane				
35	8441 Winningham	31" Water Oak	Private tree	Fence, Bore waterline
36	8439 Winningham	24" Water Oak	Private tree	Clearance prune, Fence
37	8435 Winningham	12" Live Oak	Private tree	Fence
38	8435 Winningham	10" Pine	Thin canopy, Private tree	Fence
39	8444 Winningham	4" Live Oak	Private tree, not impacted	
40	8440 Winningham	34" Water Oak	Private tree	Root prune for sanitary, Fence
41	8440 Winningham	20" Pine	Private tree	Fence
42	8440 Winningham	17" Pine	Thin canopy, Private tree	
43	8440 Winningham	22" Water Oak	Epicormic sprouts on trunk, Thin, Private tree	Zero Curb Cutback, Fence
44	8440 Winningham	26" Live Oak	Interior foliage over-pruned	Zero Curb Cutback, Fence
45	8440 Winningham	15" Water Oak	Suppressed, Private tree	Clearance prune
46	8440 Winningham	22" Water Oak	Private tree, not impacted	
47	8436 Winningham	16" Water Oak		Root prune for waterline, Fence
48	8436 Winningham	19" Water Oak		Root prune for waterline, Fence
49	8436 Winningham	17" Water Oak	Private tree	Root prune for waterline, Fence
50	8436 Winningham	17" Water Oak		Hand dig water tap&lead, Fence, Bore waterline, Zero Curb Cutback
51	8436 Winningham	8" Sugarberry		Clearance prune, Fence
52	8436 Winningham	34" Pine	Remove for lower gutter and drive approach	Remove tree
53	8434 Winningham	11" Sugarberry		Hand dig water tap&lead, Fence, Bore waterline, Root prune for street
54	8434 Winningham	21" Pine	Private tree	Root prune for street, Bore waterline, Fence
55	8430 Winningham	10" Cherylaurel	Private tree	Fence, Bore waterline
56	8430 Winningham	16" Water Oak	Chlorotic, Private tree	Root prune for street, Bore waterline, Fence
57	8430 Winningham	25" Pine	Thin canopy, Private tree	Root prune for street, Bore waterline, Fence
58	8430 Winningham	9" Yaupon	Private tree	Clearance prune
59	Not available	31" Water Oak	Private tree	Root prune for street, Bore waterline, Fence
60	Not available	21" Pine	Private tree	Root prune for street, Bore waterline, Fence
61	Not available	22" Pine	Private tree	Root prune for street, Bore waterline, Fence
62	Not available	21" Pine	Private tree	Root prune for street, Bore waterline, Fence
63	Not available	17" Green Ash	Private tree	Root prune for street, Bore waterline, Fence
69	8431 Winningham	19" Pine	Thin canopy, Private tree	Root prune for street, Fence
70	8431 Winningham	35" Pine	Thin canopy, Private tree	Root prune for street, Fence
71	8431 Winningham	15" Live Oak	Topped in past, 40% dieback	Zero Curb Cutback, Fence, Clearance prune
72	8431 Winningham	14" Pine	Private tree	Hand dig water lead, Hand dig fire hydrant, Fence
73	8429 Winningham	21" Water Oak	Basal Cavity, 30% dieback, Private tree	Root prune for street, Fence, Clearance prune
74	8425 Winningham	19" Pine	Thin canopy, Private tree	Fence
75	8425 Winningham	17" Pine	Thin canopy, Private tree	Fence
76	8425 Winningham	23" Pine	Private tree	Hand dig water lead, Fence

NO.	DATE	REVISIONS

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 APPROVED: *Craig N. Koehl* 07-24-2023

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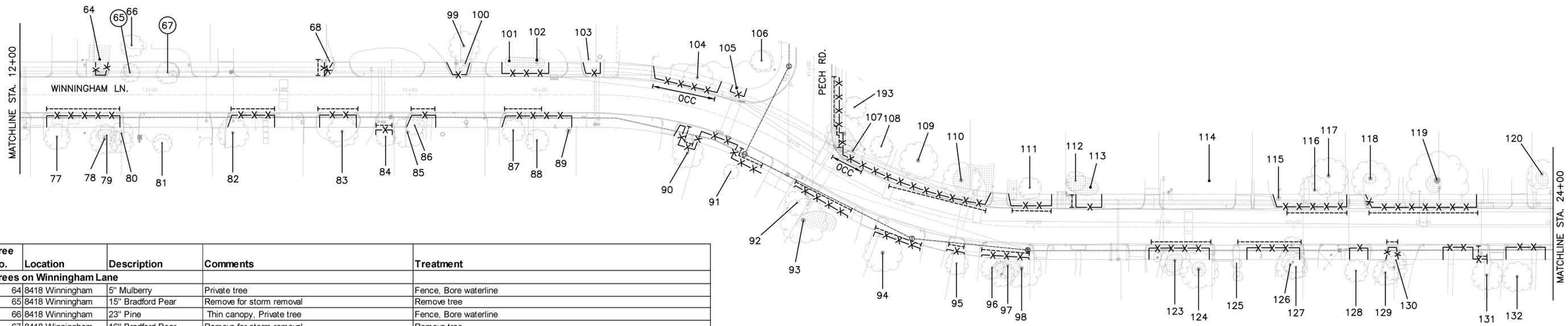
CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

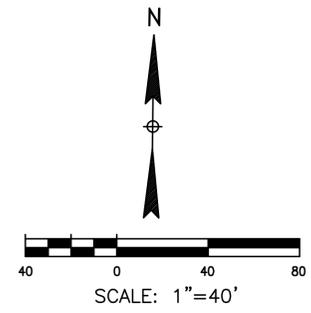
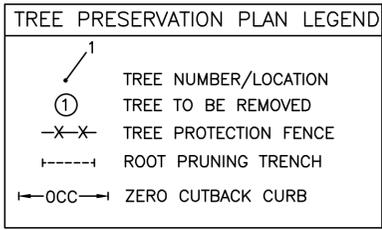
TREE PROTECTION PLAN
 SHEET 1 OF 6

SUBMITTED: 8/18/23	DESIGNED BY: JMS
SCALE:	DRAWN BY:
DATE: 7/24/23	SHEET No.: 96 OF 101
SURVEY BY: CFA	DWG. No.:
F B No.: -	

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Tree No.	Location	Description	Comments	Treatment
Trees on Winningham Lane				
64	8418 Winningham	5" Mulberry	Private tree	Fence, Bore waterline
65	8418 Winningham	15" Bradford Pear	Remove for storm removal	Remove tree
66	8418 Winningham	23" Pine	Thin canopy, Private tree	Fence, Bore waterline
67	8418 Winningham	16" Bradford Pear	Remove for storm removal	Remove tree
68	8410 Winningham	6" Red Maple		Root prune tap&lead, Fence, Bore waterline
77	8421 Winningham	25" Pine	Private tree	Root prune for street, Fence
78	8421 Winningham	26" Pine	Private tree	Root prune for street, Fence
79	8421 Winningham	17" Pine	Private tree	Root prune for street, Fence
80	8421 Winningham	16" Pine	Private tree	Root prune for street, Fence
81	8417 Winningham	14" Pine	Private tree, not impacted	
82	8413 Winningham	25" Cherrybark Oak	45% dieback, Private tree	Root prune for street, Fence
83	8409 Winningham	26" Pine	Thin canopy, Private tree	Root prune for street, Fence
84	8409 Winningham	16" Water Oak	Chlorotic, Private tree	Root prune for water leads, Fence
85	8405 Winningham	25" Pine	Private tree	Root prune for street, Fence
86	8405 Winningham	13" Pine	Suppressed	Root prune for street, Fence
87	8401 Winningham	23" Pine	Turpentine Beetles in trunk, Private tree	Root prune for street, Fence
88	8401 Winningham	20" Pine	Suppressed, Private tree	Root prune for street, Fence
89	8401 Winningham	3" Camphor	Private tree	Fence
90	8361 Winningham	22" Pine	Basal wounds, Private tree	Root prune for street, Fence
91	8357 Winningham	12" Magnolia	Private tree	Root prune for street, Fence, Clearance prune
92	8353 Winningham	20" Pine	Private tree	Root prune for street, Fence
93	8353 Winningham	42" Water Oak	Private tree	Root prune for street, Fence, Clearance prune
94	8347 Winningham	37" Live Oak	Private tree	Root prune for street, Fence, Clearance prune
95	8345 Winningham	19" Sweetgum	Private tree	Root prune for street, Fence, Clearance prune
96	8345 Winningham	19" Water Oak	Private tree	Root prune for street, Fence, Clearance prune
97	8345 Winningham	24" Water oak	Private tree	Root prune for street, Fence, Clearance prune
98	8345 Winningham	33" Water Oak	Private tree	Root prune for street, Fence, Clearance prune
99	8406 Winningham	25" Pine	Private tree	Fence, Bore waterline
100	8406 Winningham	4" Magnolia		Fence, Bore waterline
101	8406 Winningham	11" Crepe Myrtle	Private tree	Fence, Bore waterline
102	8406 Winningham	11" Crepe Myrtle	Private tree	Fence, Bore waterline
103	8406 Winningham	3" Magnolia	Private tree	Fence, Bore waterline
104	1101 Pech	27" Water Oak		Zero Curb Cutback, Bore waterline, Fence, Clearance prune
105	1101 Pech	8" Crepe Myrtle	Topped	Fence
106	1101 Pech	23" Magnolia	60% dieback, Private tree, not impacted	
107	8336 Winningham	17" Pine		Root prune for tee, Zero Curb Cutback, Bore waterline, Fence
108	8336 Winningham	18" Sweetgum	Private tree	Fence, Bore waterline
109	8336 Winningham	31" Live oak	Private tree	Root prune for street, Bore waterline, Fence, Clearance prune
110	8336 Winningham	34" Live oak	Private tree	Root prune for street, Bore waterline, Fence, Clearance prune
111	8332 Winningham	21" Magnolia	Private tree	Root prune for street, Bore waterline, Fence, Clearance prune
112	8328 Winningham	18" Live Oak	Private tree	Root prune for tap&lead, Fence, Bore waterline
113	8328 Winningham	2" Pine	Private tree	Fence, Bore waterline
114	8324 Winningham	2" Live Oak	Private tree, not impacted	
115	8320 Winningham	9" Crepe Myrtle	Topped	Root prune for street, Bore waterline, Fence
116	8320 Winningham	23" Pine	Private tree	Root prune for street, Bore waterline, Fence
117	8320 Winningham	27" Live Oak	Private tree	Root prune for street, Bore waterline, Fence
118	8316 Winningham	25" Water Oak	Hypoxylon symptoms, Private tree, poor	Root prune for street, Bore waterline, Fence
119	8316 Winningham	53" Water Oak	Co-dominant at 2', Private tree	Root prune for street, Bore waterline, Fence
120	8308 Winningham	25" Water Oak	Thin canopy, Private tree	
123	8339 Winningham	25" Post Oak	Private tree	Root prune for street, Fence
124	8339 Winningham	29" Post oak	Private tree	Root prune for street, Fence
125	8335 Winningham	10" Magnolia	Private tree	Fence
126	8335 Winningham	31" Pine	Private tree	Root prune for street, Fence
127	8335 Winningham	23" Water oak	Private tree	Root prune for street, Fence
128	8331 Winningham	22" Water Oak	Private tree	Fence
129	8331 Winningham	19" Water Oak	Basal wounds, Private tree	Root prune for street, Fence
130	8331 Winningham	17" Pine	Private tree	Root prune for street, Fence
131	8325 Winningham	27" Pine	Private tree	Root prune for street, Fence
132	8325 Winningham	25" Pine	Private tree	Fence



NOTE:

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NO.	DATE	REVISIONS

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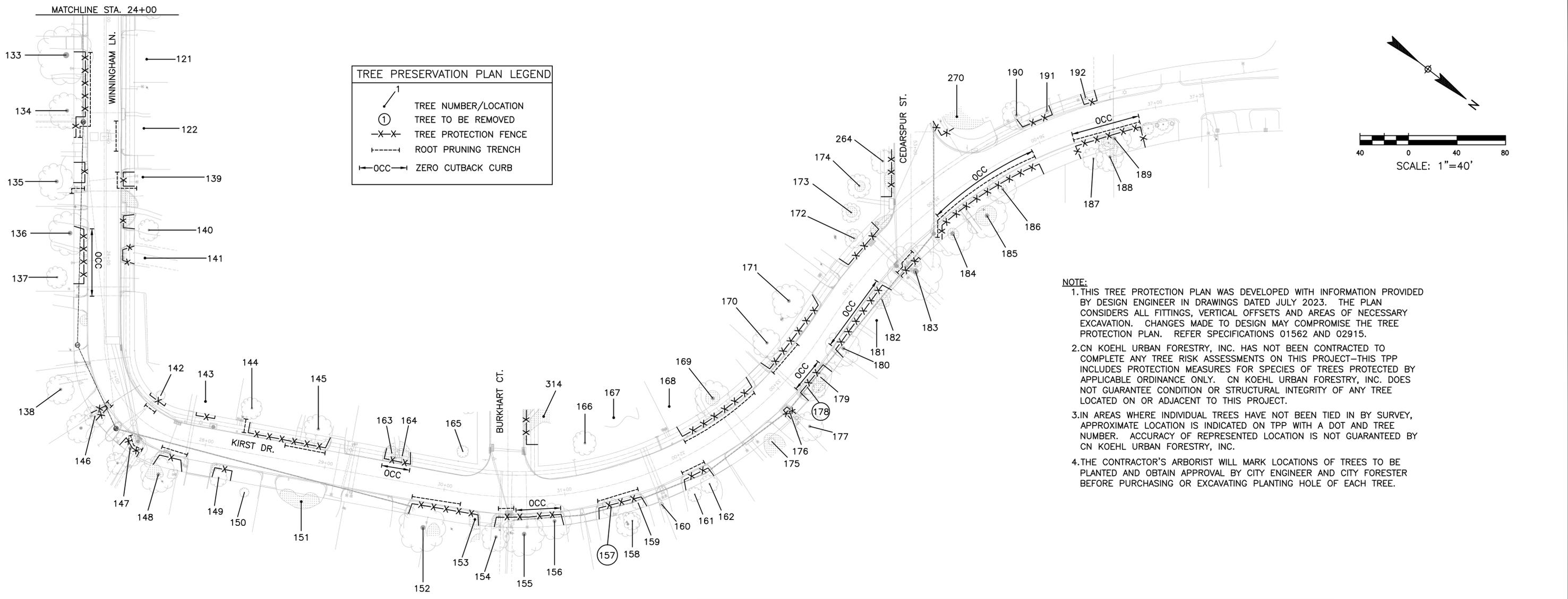
CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

TREE PROTECTION PLAN
SHEET 2 OF 6

SUBMITTED: 8/18/23	DESIGNED BY: JMS
SCALE:	DRAWN BY:
DATE: 7/24/23	SHEET No.: 97 OF 101
SURVEY BY: CFA	DWG. No:
F B No.: -	

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Tree No.	Location	Description	Comments	Treatment
Trees on Winningham Lane				
121	8308 Winningham	34" Water Oak	Private tree, not impacted	
122	8304 Winningham	37" Live Oak	Private tree, not impacted	
133	8321 Winningham	26" Cherrybark Oak	50% dieback, Private tree	Root prune for street, Fence
134	8321 Winningham	33" Live Oak	Private tree	Root prune for street, Fence, Clearance prune
135	8317 Winningham	28" Water Oak	Private tree	Root prune water lead, Fence
136	8317 Winningham	35" Live oak	Private tree	Zero Curb Cutback, Fence, Clearance prune
137	8313 Winningham	18" Magnolia	40% dieback, Private tree	Fence
138	8305 Winningham	24" Pine	Private tree, not impacted	
139	8308 Winningham	29" Pine	Private tree	Root prune tap&lead, Root prune street, Fence, Bore waterline
140	8308 Winningham	20" Pine	Private tree	Fence, Bore waterline
141	8308 Winningham	23" Cherrybark Oak	Private tree	Fence, Bore waterline
Trees on Krist Drive				
142	1101 Krist	9" Shumard Oak	Private tree	Root prune for street, Bore waterline, Fence
143	1101 Krist	5" Shumard Oak	Private tree	Fence
144	1105 Krist	21" Live Oak	Private tree	Root prune for water lead, Clearance prune, Fence, Bore waterline
145	1105 Krist	26" Live Oak	Private tree	Root prune for street, Bore waterline, Fence
146	8301 Winningham	21" Live Oak		Root prune for street, Fence, Clearance prune
147	8301 Winningham	25" Live Oak		Root prune for manhole, Fence, Clearance prune
148	1100 Krist	26" Live Oak	Private tree	Root prune for street, Fence, Clearance prune
149	1104 Krist	14" Riverbirch	Chlorotic	Fence
150	1104 Krist	9" Shumard Oak	Chlorotic, Private tree	
151	1108 Krist	3" Fringe Tree	Private tree, not impacted	
152	1110 Krist	35" Live oak	Private tree	Root prune for street, Fence, Clearance prune
153	1116 Krist	4" Eleagnus shrub		Clearance prune, Fence
154	1116 Krist	26" Live Oak	Private tree	Hand dig water lead, Root prune for street, Fence, Clearance prune
155	1120 Krist	34" Live oak	Private tree	Zero Curb Cutback, Fence, Clearance prune
156	1120 Krist	32" Live Oak		Zero curb cutback, Fence, Clearance prune
157	1124 Krist	17" Pine	Thin canopy, Remove for street widening	Remove tree
158	1124 Krist	18" Water Oak	Private tree	Root prune for street, Fence
159	1124 Krist	8" Yaupon		Fence, Clearance prune
160	1202 Krist	10" Crepe Myrtle	Topped, Private tree	

Tree No.	Location	Description	Comments	Treatment
Trees on Krist Drive				
161	1202 Krist	18" Live Oak	Private tree	Root prune for street, Fence, Clearance prune
162	1202 Krist	16" Pine	Private tree	Root prune for street, Fence
163	1109 Krist	6" Yaupon		Zero Curb Cutback, Bore waterline, Fence, Clearance prune
164	1109 Krist	6" Yaupon		Zero Curb Cutback, Bore waterline, Fence, Clearance prune
165	1109 Krist	10" Water Oak	Private tree, not impacted	
166	1201 Burkhardt Ct	23" Water oak	Private tree, not impacted	
167	1201 Burkhardt Ct	28" Water Oak	Private tree, not impacted	
168	1205 Krist	19" Pine	Private tree, not impacted	
169	1205 Krist	27" Live Oak	Private tree	Root prune for street, Bore waterline, Fence
170	1203 Krist	26" Pine	Private tree	Root prune for street, Bore waterline, Fence
171	1203 Krist	23" Pine	Private tree	Fence, Bore waterline
172	Not available	17" Live Oak	Private tree	Fence, Bore waterline
173	Not available	15" Live Oak	Private tree	Fence, Bore waterline
174	Not available	13" Shumard Oak	Private tree	Fence, Bore waterline
175	1202 Krist	6" Ligustrum	Private tree, not impacted	
176	1202 Krist	7" Crepe Myrtle	Topped	Fence
177	1210 Krist	28" Shumard Oak	Private tree	Fence
178	1210 Krist	15" Pine	Remove for street widening	Remove tree
179	1210 Krist	9" Pecan		Zero Curb Cutback, Fence, Clearance prune
180	1214 Krist	28" Pine		Zero Curb Cutback, Fence, Clearance prune
181	1214 Krist	22" Bradford Pear	Private tree	Zero Curb Cutback, Fence, Clearance prune
182	1214 Krist	20" Magnolia		Zero Curb Cutback, Fence, Clearance prune
183	1218 Krist	28" Crepe Myrtle	Private tree	Root prune for street, Fence
184	1218 Krist	28" Live Oak	Private tree	Zero Curb Cutback, Root prune for street, Fence, Clearance prune
185	1218 Krist	29" Live Oak	Private tree	Zero Curb Cutback, Root prune for street, Fence, Clearance prune
186	1218 Krist	24" Live Oak		Crown Cleaning Prune, Root stimulate, Root prune for street, Zero Curb Cutback, Clearance prune
187	1218 Krist	25" Sugarberry	Private tree	Zero Curb Cutback, Root prune for street, Fence, Clearance prune
188	1218 Krist	29" Pine	Private tree	Zero Curb Cutback, Root prune for street, Fence
189	1218 Krist	32" Water Oak		Crown Cleaning Prune, Root stimulate, Root prune for street, Zero Curb Cutback, Clearance prune
190	8300 Cedarspur	24" Pine	Private tree	Fence, Bore waterline
191	8300 Cedarspur	9" Crepe Myrtle		Fence, Bore waterline
192	8300 Cedarspur	9" Crepe Myrtle		Fence, Bore waterline

NO.	DATE	REVISIONS

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APPROVED: *Craig N. Koehl* 07-24-2023

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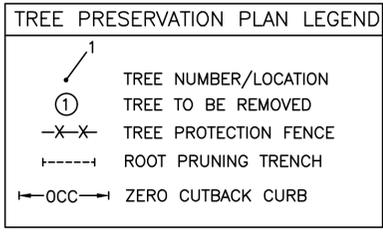
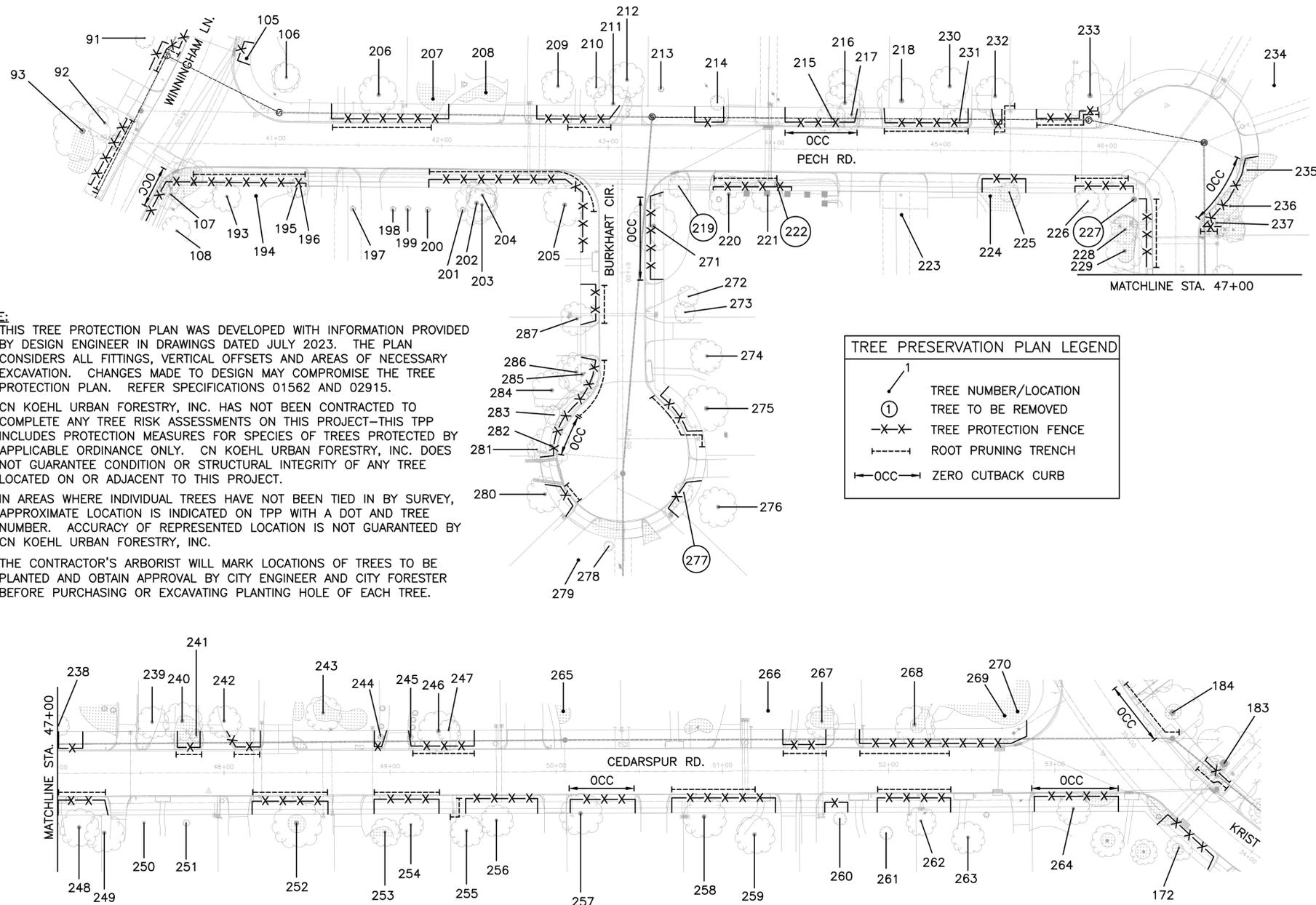
CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

TREE PROTECTION PLAN
SHEET 3 OF 6

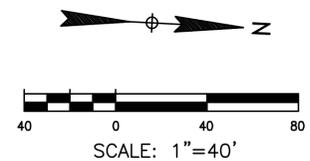
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F B No.: -	

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Tree No.	Location	Description	Comments	Treatment
Trees on Cedarspur Road				
234	8336 Cedarspur	26" Live Oak	Private tree, not impacted	
235	8332 Cedarspur	12" Pine		Zero Curb Cutback, Fence
236	8332 Cedarspur	16" Water Oak		Zero Curb Cutback, Fence
237	8332 Cedarspur	15" Pine		Zero Curb Cutback, Fence
238	8328 Cedarspur	16" Water Oak	Private tree	Fence
239	8324 Cedarspur	22" pine	Private tree	Fence
240	8324 Cedarspur	28" Pine	Private tree	Fence
241	8324 Cedarspur	12" Magnolia		Root prune for street, Fence, Clearance prune
242	8324 Cedarspur	24" Pine	Thin canopy, Private tree	Root prune for street, Fence, Clearance prune
243	8320 Cedarspur	25" Pine	Private tree, not impacted	
244	8316 Cedarspur	7" Crepe Myrtle		Fence
245	8316 Cedarspur	4" Citrus		Fence
246	8316 Cedarspur	27" Pine		Root prune for street, Fence
247	8316 Cedarspur	16" Pine	Private tree	Root prune for street, Fence
248	8333 Cedarspur	25" Live Oak	Private tree	Root prune for street, Bore waterline, Fence, Clearance prune
249	8329 Cedarspur	23" Pine	Private tree	Fence, Bore waterline
250	8329 Cedarspur	24" Shumard Oak	Private tree, not impacted	
251	8329 Cedarspur	4" Live Oak	Private tree, not impacted	
252	8325 Cedarspur	30" Water Oak	Private tree	Root prune for street, Bore waterline, Fence, Clearance prune
253	8321 Cedarspur	10" Palm	Private tree, not impacted	
254	8321 Cedarspur	19" Water Oak	Private tree	Root prune for street, Bore waterline, Fence
255	8317 Cedarspur	24" Pine	Private tree	Root prune for tap&lead, Fence, Bore waterline
256	8317 Cedarspur	21" Pine	Private tree	Fence, Bore waterline
257	8313 Cedarspur	25" Pine	Basal wounds	Zero Curb Cutback, Bore waterline, Fence
258	8309 Cedarspur	23" Shumard Oak	Private tree	Hand dig tap&lead, Bore waterline, Root prune street, Fence, Clearance prune
259	8309 Cedarspur	23" Live Oak	Private tree	Fence, Bore waterline
260	8307 Cedarspur	9" Shumard Oak	Private tree	Fence, Bore waterline
261	8307 Cedarspur	5" Pecan	Private tree, not impacted	
262	8307 Cedarspur	22" pine	Private tree	Hand dig tap&lead, Bore waterline, Root prune street, Fence
263	8303 Cedarspur	21" Pine	Private tree, not impacted	
264	1213 Krist	23" Pine		Zero Curb Cutback, Fence
265	8312 Cedarspur	9" Live Oak	Private tree, not impacted	
266	8304 Cedarspur	25" Sweetgum	60% dieback, Private tree, not impacted	
267	8304 Cedarspur	19" Live Oak	Private tree	Root prune for street, Fence
268	8300 Cedarspur	22" pine	Private tree	Root prune for street, Fence
269	8300 Cedarspur	28" Water Oak	Private tree	Fence
270	8300 Cedarspur	19" Pine	Private tree	Fence
Trees on Burkhardt Circle				
271	8336 Burkhardt Cir	29" Water oak		Zero Curb Cutback, Bore waterline, Fence, Clearance prune
272	8336 Burkhardt Cir	16" Pine	Private tree, not impacted	
273	8336 Burkhardt Cir	17" Pine	Private tree, not impacted	
274	8332 Burkhardt Cir	31" Water Oak	Chlorotic, Private tree	
275	8332 Burkhardt Cir	29" Water oak	Interior foliage over-pruned, Private tree	Root prune tap&lead, Root prune street, Fence, Bore waterline
276	8328 Burkhardt Cir	22" Red Maple	Private tree	Fence, Bore waterline
277	8328 Burkhardt Cir	10" Crepe Myrtle	Remove for stabilization back of curb, Topped	
278	8325 Burkhardt Cir	5" Live Oak	Private tree, not impacted	
279	8325 Burkhardt Cir	24" Live Oak	Private tree, not impacted	
280	8329 Burkhardt Cir	19" Water Oak	Private tree	Root prune for street, Bore waterline, Fence, Clearance prune
281	8331 Burkhardt Cir	5" Sago	Private tree, not impacted	
282	8331 Burkhardt Cir	21" Live Oak		Zero Curb Cutback, Bore waterline, Fence, Clearance prune
283	8331 Burkhardt Cir	5" Sago	Private tree, not impacted	
284	8331 Burkhardt Cir	22" Live oak	Private tree	Root prune for street, Bore waterline, Fence
285	8331 Burkhardt Cir	4" Sago		Fence
286	8331 Burkhardt Cir	24" Live Oak	Private tree	Hand dig water lead, Root prune for street, Fence, Clearance prune
287	8331 Burkhardt Cir	23" Live Oak	Private tree	Hand dig water lead, Root prune for street, Fence, Clearance prune



Tree No.	Location	Description	Comments	Treatment
Trees on Pech Road				
193	8336 Winingham	19" Water Oak	Trunk decay, Private tree	Root prune for storm, Bore waterline, Fence
194	8336 Winingham	23" Pine	Private tree, not impacted	
195	8336 Winingham	3' Sago	Private tree	Fence, Bore waterline
196	8336 Winingham	3' Sago		Fence, Bore waterline
197	8335 Burkhardt Cir	10" Crepe Myrtle	Topped, Private tree	
198	8335 Burkhardt Cir	10" Crepe Myrtle	Topped, Private tree	
199	8335 Burkhardt Cir	10" Crepe Myrtle	Topped, Private tree	
200	8335 Burkhardt Cir	10" Crepe Myrtle	Topped, Private tree	
201	8335 Burkhardt Cir	10" Crepe Myrtle	Topped, Private tree	
202	8335 Burkhardt Cir	29" Pine	Private tree	Root prune for storm, Bore waterline, Fence
203	8335 Burkhardt Cir	23" Tallow	Private tree	Root prune for storm, Bore waterline, Fence, Clearance prune
204	8335 Burkhardt Cir	18" Pine	Private tree	Root prune for storm, Bore waterline, Fence
205	8335 Burkhardt Cir	25" Pine	Private tree	Root prune for storm&street, Bore waterline, Fence
206	1105 Pech	26" Shumard Oak	Private tree	Root prune for street, Fence, Clearance prune
207	1105 Pech	10" Tallow	Topped, Private tree	Fence
208	1105 Pech	5" Crepe Myrtle	Private tree, not impacted	
209	1109 Pech	27" Live Oak	Private tree	Fence, Clearance prune
210	1109 Pech	14" Live Oak	Private tree	Fence
211	1109 Pech	23" Pine	Old lightning strike wound, Private tree	Root prune for street, Fence
212	1109 Pech	16" Hickory	Private tree	Fence
213	1113 Pech	5" Texas Mt Laurel	Private tree, not impacted	
214	1113 Pech	8" Shumard Oak	Private tree	Fence, Trenchless sanitary

Tree No.	Location	Description	Comments	Treatment
Trees on Pech Road				
215	1201 Pech	18" Live Oak		Zero Curb Cutback, Trenchless sanitary, Fence, Clearance prune
216	1201 Pech	24" Water oak	Private tree	Fence, Trenchless sanitary
217	1201 Pech	17" Live Oak	Suppressed	Zero Curb Cutback, Trenchless sanitary, Fence, Clearance prune
218	1205 Pech	25" Water Oak	Private tree	Root prune for street, Fence, Trenchless sanitary, Clearance prune
219	8336 Burkhardt Cir	14" Pine		Remove for storm
220	8336 Burkhardt Cir	27" Pine	Thin canopy, Private tree	Root prune for storm, Bore waterline, Fence
221	8336 Burkhardt Cir	19" Pine	Old lightning strike wound, Private tree	Root prune for storm, Bore waterline, Fence
222	8336 Burkhardt Cir	10" Crepe Myrtle		Remove for storm
223	8333 Cedarspur	10" Holly	Private tree, not impacted	
224	8333 Cedarspur	3" Magnolia	Private tree	Fence, Bore waterline
225	8333 Cedarspur	5" Sago		Fence, Bore waterline
226	8333 Cedarspur	15" Baldcypress	Private tree	Root prune for street, Bore waterline, Fence
227	8333 Cedarspur	33" Cherrybark Oak		Remove for waterline bends
228	8333 Cedarspur	19" Water Oak	Private tree	Root prune for street, Bore waterline, Fence
229	8333 Cedarspur	27" Water Oak	Private tree	Root prune for street, Bore waterline, Fence, Clearance prune
230	1205 Pech	22" Cherrybark Oak	Private tree	Fence, Trenchless sanitary
231	1205 Pech	9" Crepe Myrtle	Topped	Fence, Trenchless sanitary
232	1205 Pech	19" Hickory	Private tree	Root prune for water lead, Root prune for sanitary, Fence
233	1209 Pech	28" Live Oak	Private tree	Root prune for manhole and sanitary, Fence

NO.	DATE	REVISIONS

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APPROVED: *Craig N. Koehl* 07-24-2023

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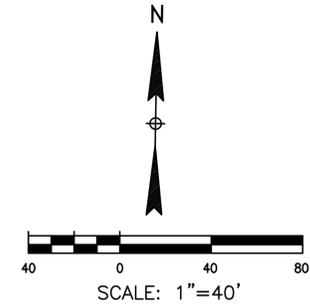
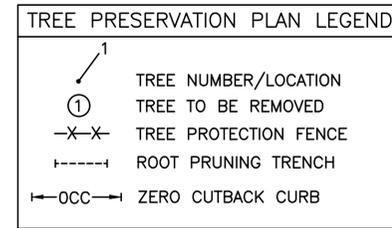
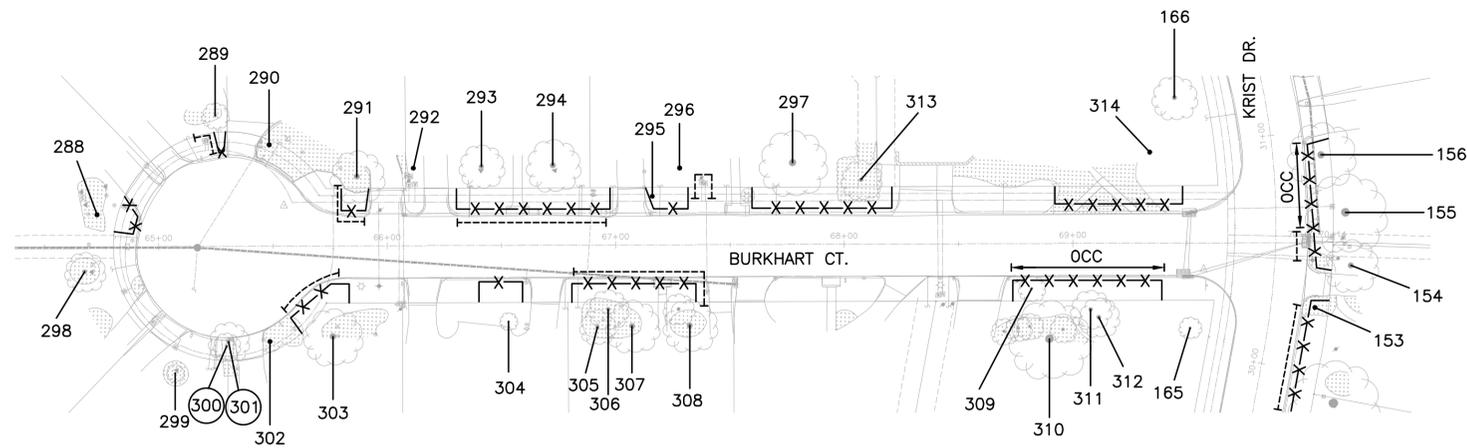
CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

TREE PROTECTION PLAN
SHEET 4 OF 6

SUBMITTED: 8/18/23	DESIGNED BY: JMS
SCALE:	DRAWN BY:
DATE: 7/24/23	SHEET No.: 99 OF 101
SURVEY BY: CFA	DWG. No:
F B No.: -	

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Tree No.	Location	Description	Comments	Treatment
Trees on Burkhart Court				
288	8316 Burkhart Ct	5" Persimmon	Private tree	Fence, Bore waterline
289	8312 Burkhart Ct	14" Pine	Private tree	Root prune tap&lead, Bore waterline, Fence
290	8318 Burkhart Ct	5" Crepe Myrtle	Topped	
291	8318 Burkhart Ct	21" Live Oak	Private tree	Root prune tap&lead, Root prune street, Fence, Bore waterline
292	8304 Burkhart Ct	8" Red Maple	Private tree, not impacted	
293	8304 Burkhart Ct	20" Live Oak	Private tree	Root prune for street, Bore waterline, Fence, Clearance prune
294	8304 Burkhart Ct	22" Live Oak	Private tree	Root prune for street, Bore waterline, Fence, Clearance prune
295	8300 Burkhart Ct	5" Crepe Myrtle	Topped	Fence, Bore waterline
296	8300 Burkhart Ct	43" Live Oak	Interior foliage over-pruned	Root prune tap&lead, Bore waterline, Fence
297	8300 Burkhart Ct	38" Live Oak	Interior foliage over-pruned	Fence, Bore waterline
298	8321 Burkhart Ct	19" Live Oak	Private tree	
299	8317 Burkhart Ct	10" Live Oak	Private tree, not impacted	
300	8317 Burkhart Ct	13" Eastern Red Cedar	Remove for stabilization back of curb	Remove tree
301	8317 Burkhart Ct	17" Pine	Remove for stabilization back of curb	Remove tree
302	8313 Burkhart Ct	5" Crepe Myrtle	Topped	Fence, Bore waterline
303	8313 Burkhart Ct	31" Live oak	Private tree	Root prune street, Bore waterline, Fence, Clearance prune
304	8309 Burkhart Ct	10" Shumard Oak	Private tree	Fence
305	8305 Burkhart Ct	17" Tallow	Private tree, not impacted	
306	8305 Burkhart Ct	18" Pine	Private tree	Root prune for street, Fence
307	8305 Burkhart Ct	26" Live Oak	Private tree	Root prune for street, Fence, Clearance prune
308	8305 Burkhart Ct	25" Live Oak	Private tree	Root prune for water lead, Root prune for street, Fence
309	1109 Krist	12" Magnolia	Suppressed	Zero Curb Cutback, Fence, Clearance prune
310	1109 Krist	42" Live Oak	Private tree	Zero Curb Cutback, Fence
311	1109 Krist	25" Pine	Private tree	Zero Curb Cutback, Fence
312	1109 Krist	19" Pine	Private tree	Zero Curb Cutback, Fence
313	8300 Burkhart Ct	17" Magnolia	Private tree	Fence, Bore waterline
314	1201 Burkhart Ct	42" Live Oak	Private tree	Fence, Bore waterline, Clearance prune

- NOTE:**
- THIS TREE PROTECTION PLAN WAS DEVELOPED WITH INFORMATION PROVIDED BY DESIGN ENGINEER IN DRAWINGS DATED JULY 2023. THE PLAN CONSIDERS ALL FITTINGS, VERTICAL OFFSETS AND AREAS OF NECESSARY EXCAVATION. CHANGES MADE TO DESIGN MAY COMPROMISE THE TREE PROTECTION PLAN. REFER SPECIFICATIONS 01562 AND 02915.
 - CN KOEHL URBAN FORESTRY, INC. HAS NOT BEEN CONTRACTED TO COMPLETE ANY TREE RISK ASSESSMENTS ON THIS PROJECT—THIS TPP INCLUDES PROTECTION MEASURES FOR SPECIES OF TREES PROTECTED BY APPLICABLE ORDINANCE ONLY. CN KOEHL URBAN FORESTRY, INC. DOES NOT GUARANTEE CONDITION OR STRUCTURAL INTEGRITY OF ANY TREE LOCATED ON OR ADJACENT TO THIS PROJECT.
 - IN AREAS WHERE INDIVIDUAL TREES HAVE NOT BEEN TIED IN BY SURVEY, APPROXIMATE LOCATION IS INDICATED ON TPP WITH A DOT AND TREE NUMBER. ACCURACY OF REPRESENTED LOCATION IS NOT GUARANTEED BY CN KOEHL URBAN FORESTRY, INC.
 - THE CONTRACTOR'S ARBORIST WILL MARK LOCATIONS OF TREES TO BE PLANTED AND OBTAIN APPROVAL BY CITY ENGINEER AND CITY FORESTER BEFORE PURCHASING OR EXCAVATING PLANTING HOLE OF EACH TREE.

NO.	DATE	REVISIONS

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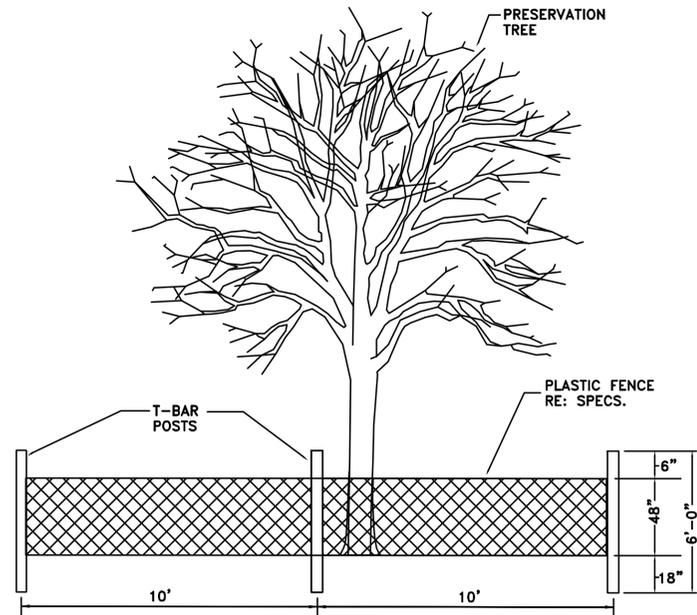
CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

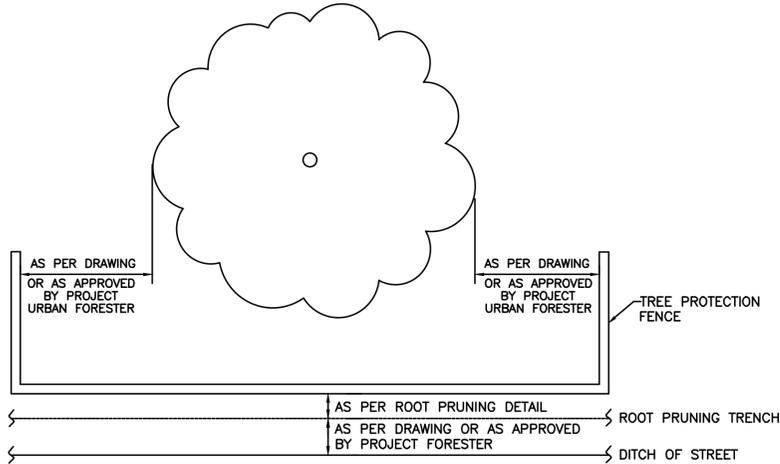
TREE PROTECTION PLAN
 SHEET 5 OF 6

SUBMITTED: 8/18/23	DESIGNED BY: JMS
SCALE:	DRAWN BY:
DATE: 7/24/23	SHEET No.: 100 OF 101
SURVEY BY: CFA	DWG. No:
F B No.: -	

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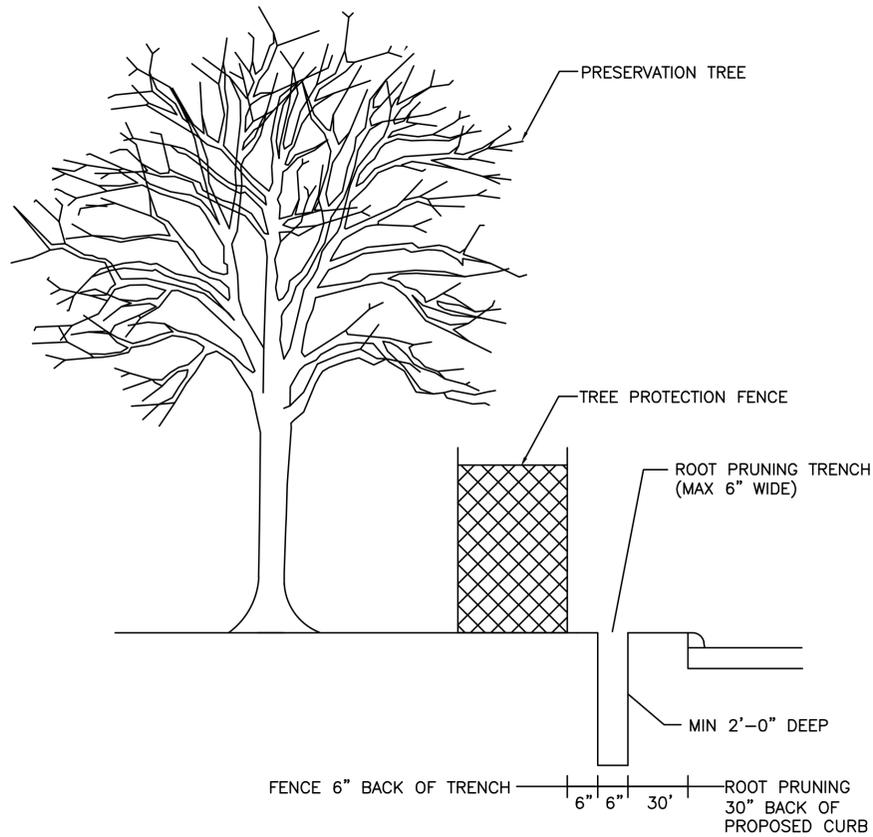


TREE PROTECTION FENCING DETAIL A
NOT TO SCALE

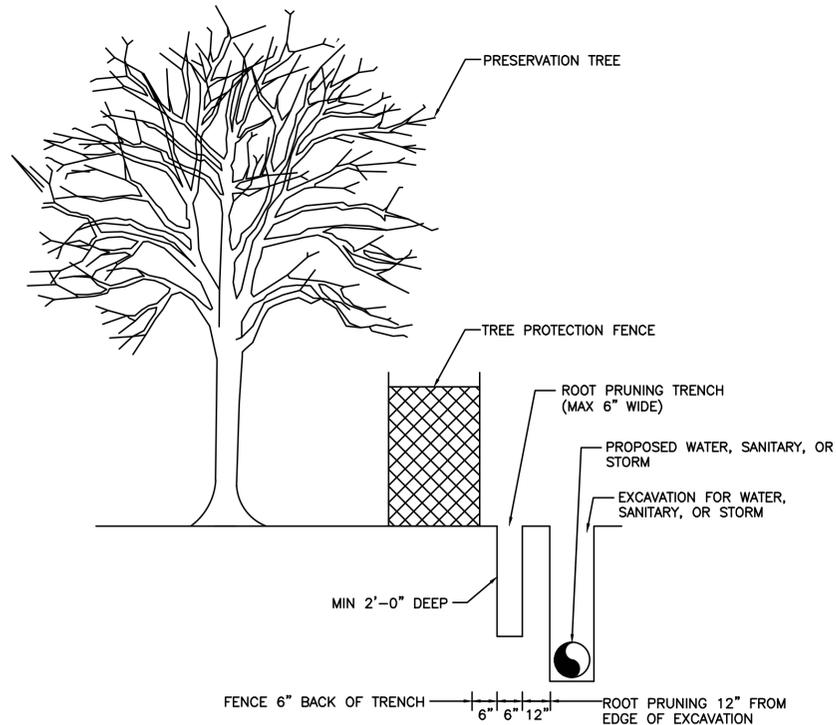


TREE PROTECTION FENCING DETAIL B
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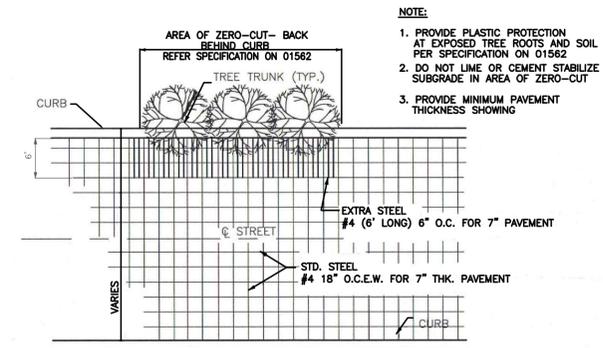
Tree Removal List			
Tree No.	Location	Description	Comments
18	Median	15" Crepe Myrtle	Remove for street widening
52	8436 Winningham	34" Pine	Remove for lower gutter and drive approach
65	8418 Winningham	15" Bradford Pear	Remove for storm removal
67	8418 Winningham	16" Bradford Pear	Remove for storm removal
157	1124 Krist	17" Pine	Thin canopy, Remove for street widening
178	1210 Krist	15" Pine	Remove for street widening
219	8336 Burkhardt Cir	14" Pine	Remove for storm
222	8336 Burkhardt Cir	10" Crepe Myrtle	Remove for storm
227	8333 Cedarspur	33" Cherrybark Oak	Remove for waterline bends
277	8328 Burkhardt Cir	10" Crepe Myrtle	Remove for stabilization back of curb, Topped
300	8317 Burkhardt Ct	13" Eastern Red Cedar	Remove for stabilization back of curb
301	8317 Burkhardt Ct	17" Pine	Remove for stabilization back of curb



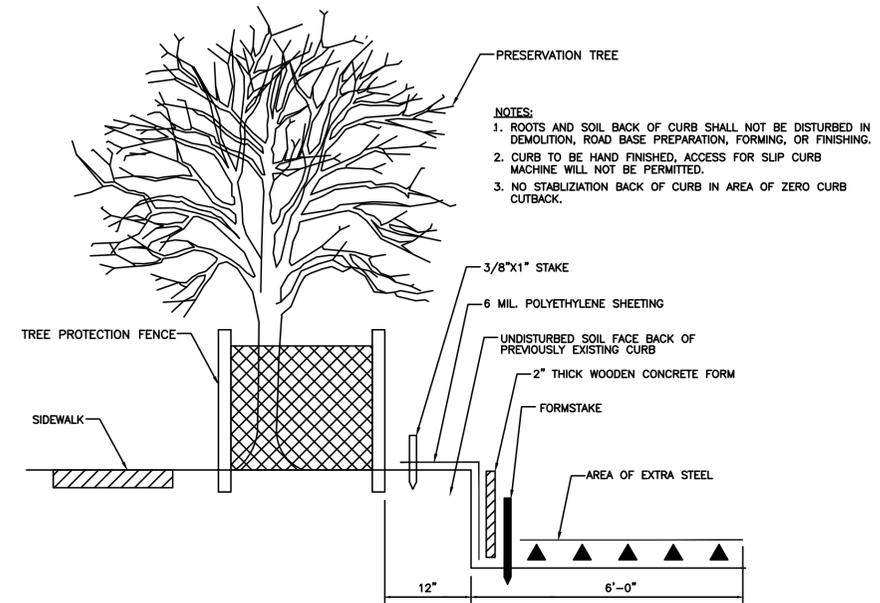
ROOT PRUNE FOR STREET-CURB & GUTTER - NO OCC
NOT TO SCALE



ROOT PRUNE FOR WATER, SANITARY, OR STORM LINE
NOT TO SCALE



ZERO CURB CUTBACK DETAIL
EXTRA STEEL BEHIND CURB
NOT TO SCALE



ZERO CURB CUTBACK DETAIL-PROFILE VIEW
NOT TO SCALE

NO.	DATE	REVISIONS

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CITY OF SPRING VALLEY VILLAGE

BRIGHTON PLACE RECONSTRUCTION

TREE PROTECTION PLAN
SHEET 6 OF 6

SUBMITTED: 8/18/23	DESIGNED BY: JMS
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DATE: 7/24/23	SHEET No.: 101 OF 101
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F B No.: -	

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