

ACCESS ROADWAY, PARKING LOT PAVEMENT & BOAT RAMP CONSTRUCTION

IN BUFFALO PARK

PROJ. NO. 472-82530

INDEX NO. 785345

CITY OF WICHITA, KANSAS

M. E. LINDEBAK - CITY ENGINEER

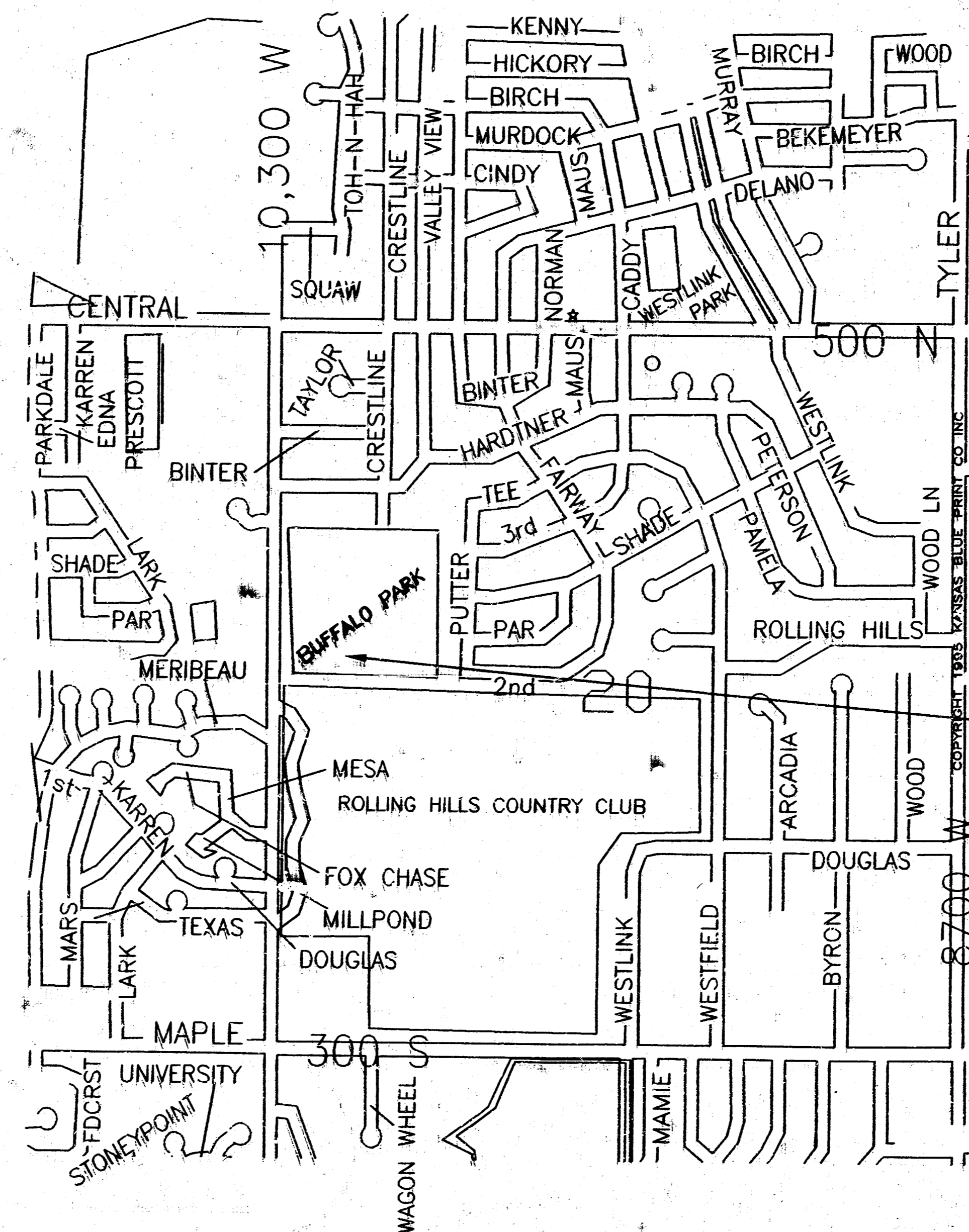
GENERAL NOTES:

1. UTILITY SERVICE LINES, POLES, VALVE BOXES, METERS, AND ETCETERA ARE TO BE ADJUSTED AS NECESSARY BY OTHERS PRIOR TO CONSTRUCTION UNLESS THE PLANS SPECIFICALLY CALL FOR THEIR ADJUSTMENT BY THE CONTRACTOR OR UNLESS THE PLANS SPECIFICALLY IDENTIFY A UTILITY TO BE ADJUSTED BY ITS OWNER DURING CONSTRUCTION. EXISTING UTILITIES AND THEIR LOCATION, AS SHOWN ON THE PLANS, REPRESENT THE BEST INFORMATION OBTAINABLE FOR DESIGN. THE CONTRACTOR WILL BE REQUIRED TO WORK AROUND EXISTING UTILITIES WITHIN THE RIGHT-OF-WAY WHICH DO NOT CONFLICT WITH PROPOSED CONSTRUCTION.
2. THE CONTRACTOR IS SOLELY RESPONSIBLE TO NOTIFY AND TO MAKE ANY NECESSARY ARRANGEMENTS WITH UTILITY COMPANIES FOR ANY NEEDED ADJUSTMENTS OF UTILITY FACILITIES PRIOR TO START OF WORK.
3. CONTRACTOR WILL BE REQUIRED TO PROVIDE AS MINIMUM ADVANCE NOTICE OF FORTY-EIGHT (48) HOURS TO UTILITY COMPANIES PRIOR TO STARTING ANY EXCAVATION AS FOLLOWS:

KANSAS ONE CALL	687-2470
SOUTHWESTERN BELL TELEPHONE COMPANY	1-316-571-2611
CABLEVISION	282-4270 OR 263-2081
KPL GAS SERVICE	263-7511
KANSAS GAS & ELECTRIC	264-1141
CITY OF WICHITA WATER DEPARTMENT	268-4908
CITY OF WICHITA SEWER DEPARTMENT	268-4071
ARKLA GAS COMPANY	942-8350 OR 263-8161
PARK DEPARTMENT FOR MARKING THEIR UTILITY LINES	264-1642
BOTANICA OFFICE	284-0451
4. RUBBLE FROM THE REMOVAL OF MISCELLANEOUS STRUCTURES AND EXCAVATION WHICH IS TO BE WASTED SHALL BE DISPOSED OF ON SITES TO BE PROVIDED BY THE CONTRACTOR. THESE SITES SHALL BE APPROVED BY THE ENGINEER AS TO SUITABILITY, APPEARANCE AND SITE LOCATION. LOCATIONS THAT, IN THE OPINION OF THE ENGINEER, WILL LEAVE AN UNSIGHTLY APPEARANCE WILL NOT BE APPROVED. ALL DISPOSAL SITES MUST BE APPROVED BY THE KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT. MATERIAL EITHER STOCKPILED OR DISPOSED OF IN A FLOOD PLAIN WOULD REQUIRE A KANSAS STATE BOARD OF AGRICULTURE PERMIT. ANY MATERIAL DUMPED IN WATERS OF THE UNITED STATES OR WETLANDS IS SUBJECT TO U.S. CORPS OF ENGINEERS PERMITTING REGULATIONS. ANY MATERIAL BURIED OR STOCKPILED BEYOND APPROVED CONSTRUCTION LIMITS WOULD REQUIRE ADDITIONAL ARCHAEOLOGICAL INVESTIGATIONS UNLESS BURIED IN A PREVIOUSLY APPROVED BORROW LOCATION. THE COST OF DISPOSING OF RUBBLE FROM THE REMOVAL OF MISCELLANEOUS STRUCTURES, INCLUDING LOADING AND HAULING SHALL BE SUBSIDIARY TO THE OTHER BID ITEMS.
5. PROPERTIES WITHIN THE PROJECT LIMITS MAY HAVE UNDERGROUND SPRINKLER SYSTEMS IN PUBLIC EASEMENT WHICH CONFLICT WITH NEW CONSTRUCTION. CONTRACTOR WILL BE REQUIRED TO REMOVE SUCH IMPROVEMENTS SHOULD THEY NOT BE REMOVED BY THEIR OWNER AT THE TIME OF CONSTRUCTION OF THE PROJECT. THE CONTRACTOR WILL BE REQUIRED TO SALVAGE ALL SPRINKLER HEADS AND/OR VALVES AND GIVE SUCH MATERIAL TO THEIR OWNER. PORTIONS OF UNDERGROUND SPRINKLER SYSTEMS NOT IN CONFLICT WITH NEW CONSTRUCTION SHALL BE PROTECTED FROM DAMAGE AND SHALL REMAIN IN PLACE. ALL WORK IN CONNECTION WITH UNDERGROUND SPRINKLER SYSTEMS SHALL BE CONSIDERED AS SUBSIDIARY TO THE CONTRACT PAY ITEMS OF WORK.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR WILL BE REQUIRED TO RE-ESTABLISH ANY PROPERTY IRONS WHICH ARE DAMAGED OR DESTROYED BY HIS CONSTRUCTION OPERATIONS. SUCH IRONS SHALL BE RE-ESTABLISHED BY A LICENSED LAND SURVEYOR OR A LICENSED PROFESSIONAL ENGINEER IN ACCORDANCE WITH STATE LAWS.
7. ANY FENCE REMOVED FOR CONSTRUCTION SHALL BE REPAIRED IN A CONDITION EQUAL TO, OR BETTER THAN ORIGINAL, AT NO ADDITIONAL COST TO THE OWNER. THIS COST SHALL BE CONSIDERED AS SUBSIDIARY TO OTHER BID ITEMS.
8. THE CONTRACTOR SHALL GIVE ALL PROPERTY OWNERS AND/OR TENANTS OF DEVELOPED PROPERTY ABUTTING THE PROJECT LIMITS A MINIMUM OF TEN (10) DAYS ADVANCE NOTICE PRIOR TO START OF CONSTRUCTION.
9. THE CONTRACTOR MUST EXAMINE THE CONSTRUCTION SITE PRIOR TO BIDDING AND BE SATISFIED AS TO THE WORK SHOWN FOR COMPLETION. AFTER BIDS HAVE BEEN RECEIVED, THE CONTRACTOR SHALL NOT ASSERT THAT THERE WAS A MISUNDERSTANDING OF THE QUANTITIES OF WORK OR OF THE NATURE OF THE WORK TO BE COMPLETED.
10. ALL CONSTRUCTION AND MATERIALS, UNLESS OTHERWISE NOTED, TO COMPLY WITH CITY OF WICHITA SPECIFICATIONS AND STANDARDS.
11. THE CONTRACTOR SHALL ADJUST WATER VALVE BOXES AND FIRE HYDRANTS AS DIRECTED BY THE ENGINEER. THIS COST IS SUBSIDIARY TO OTHER BID ITEMS. THE WATER DEPARTMENT SHALL FIELD LOCATE WATER VALES ONE TIME DURING CONSTRUCTION WHEN REQUESTED BY THE CONTRACTOR. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PRESERVE SUCH FIELD LOCATIONS DURING THE CONSTRUCTION PROCESS. WATER VALVES, WATER VALVE BOXES OR FIRE HYDRANTS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED BY THE CONTRACTOR AT HIS OWN EXPENSE.
12. A SAW CUT OF AT LEAST ONE-HALF THE DEPTH OF EXISTING SURFACE COURSES OR ONE-FOURTH THE DEPTH OF THE EXISTING TOTAL PAVEMENT THICKNESS SHALL BE PROVIDED WHERE PROPOSED ABUTS AN EXISTING SURFACE COURSE OR PAVEMENT REMOVAL. SAWED JOINTS TO FACILITATE REMOVAL WITHIN THREE (3) FEET OF EXISTING JOINTS WILL NOT BE PERMITTED AND FOR SUCH INSTANCES THE LIMITS OF REMOVAL SHALL EXTEND TO THE EXISTING JOINT. SUCH SAW CUTS WILL NOT BE PAID FOR DIRECTLY AND THIS COST SHALL BE CONSIDERED AS SUBSIDIARY TO THE OTHER BID ITEMS.
13. EARTHWORK CONSTRUCTION IS BASED ON APP ALTERNATE #1.

INDEX OF SHEETS

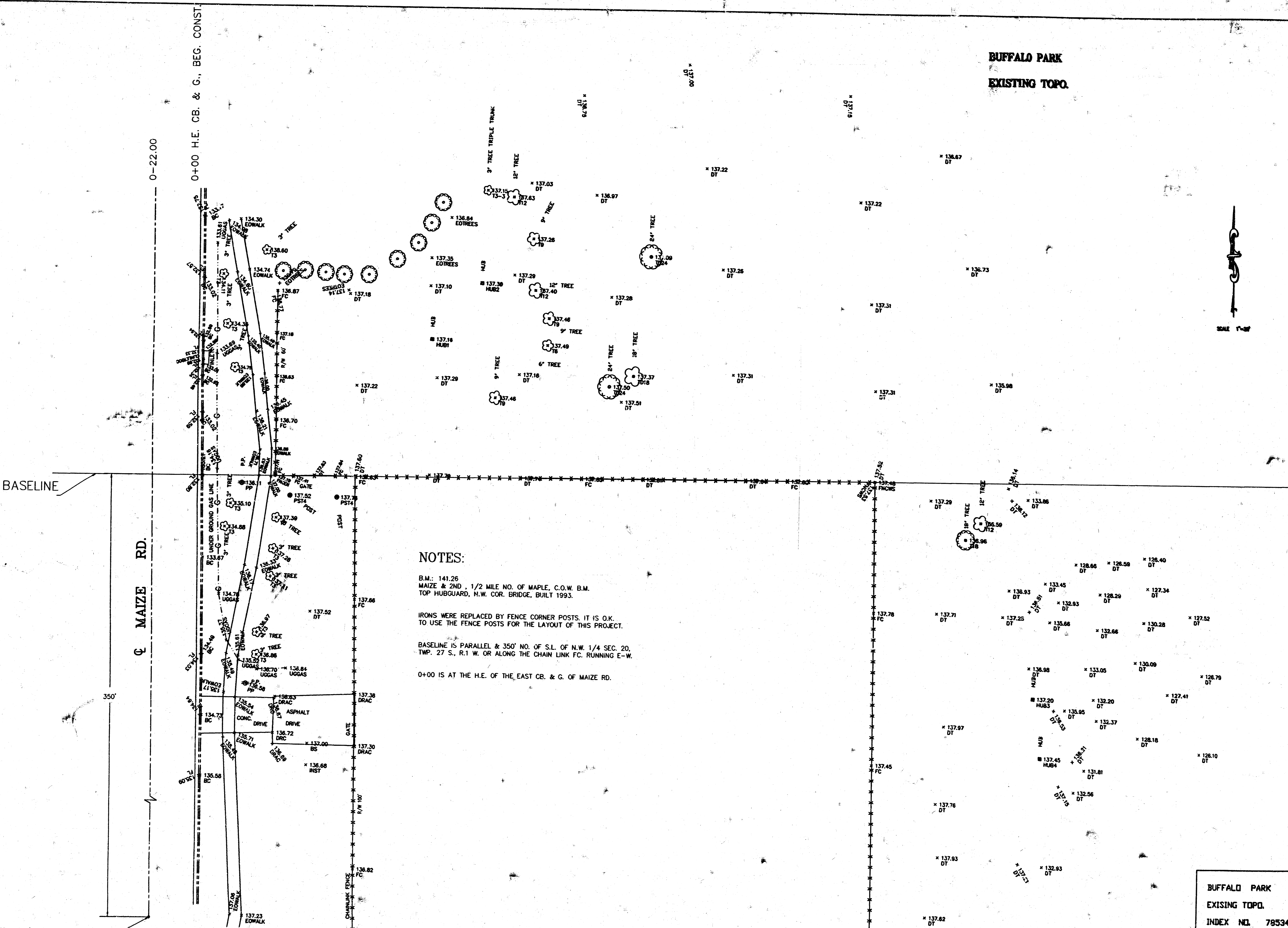
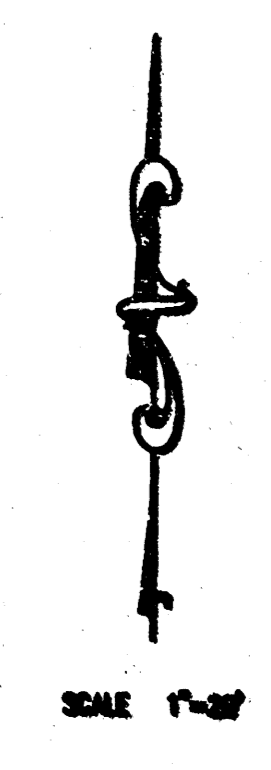
SHEET 1	-	TITLE SHEET
SHEET 2	-	EXISTING TOPO.
SHEET 3	-	REMOVAL
SHEET 4	-	CONSTRUCTION PLAN
SHEET 5	-	DETAILS



NOT TO SCALE

BUFFALO PARK
TITLE SHEET
INDEX # 785345
SHEET 1 OF 7
DRAWN BY: DESIGN BY:

**BUFFALO PARK
EXISTING TOPO.**

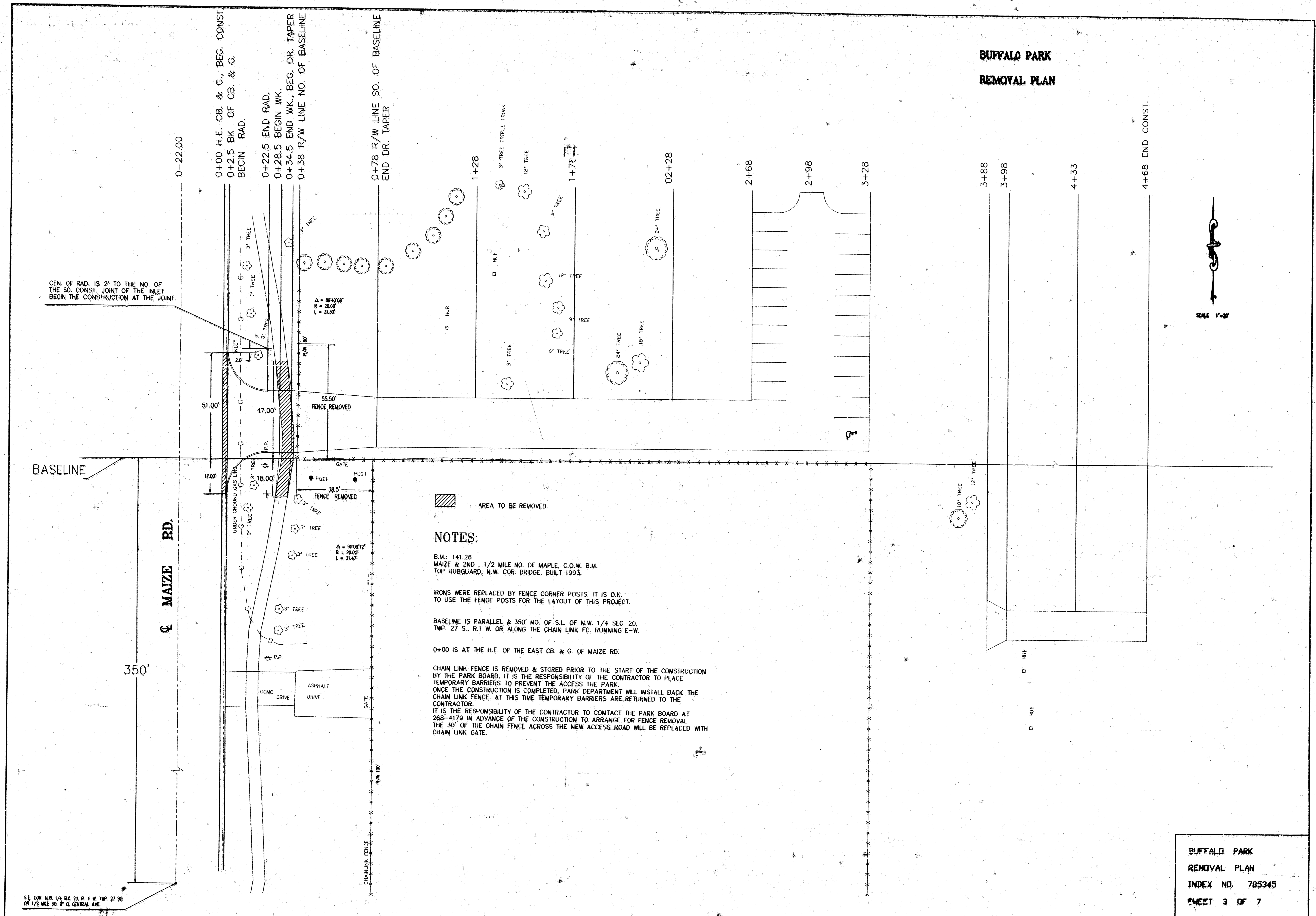


NOTES:
 B.M.: 141.26
 MAIZE & 2ND, 1/2 MILE NO. OF MAPLE, C.O.W. B.M.
 TOP HUBGUARD, N.W. COR. BRIDGE, BUILT 1993.
 IRONS WERE REPLACED BY FENCE CORNER POSTS. IT IS O.K.
 TO USE THE FENCE POSTS FOR THE LAYOUT OF THIS PROJECT.
 BASELINE IS PARALLEL & 350' NO. OF S.L. OF N.W. 1/4 SEC. 20,
 TWP. 27 S., R.1 W. OR ALONG THE CHAIN LINK FC. RUNNING E-W.
 0+00 IS AT THE H.E. OF THE EAST CB. & G. OF MAIZE RD.

S.E. COR. N.W. 1/4 SEC. 20, R. 1 W. TWP. 27 SO.
 OR 1/2 MILE SO. OF CL. CENTRAL AVE.

BUFFALO PARK
 EXISTING TOPO.
 INDEX NO. 785345
 SHEET 2 OF 7
 DRAWN BY: B.S. REVISION BY: B.S.

**BUFFALO PARK
REMOVAL PLAN**



CEN. OF RAD. IS 2' TO THE NO. OF THE SO. CONST. JOINT OF THE INLET. BEGIN THE CONSTRUCTION AT THE JOINT.

0+00 H.E. CB. & G. BEG. CONST.
0+2.5 BK OF CB. & G. BEG. RAD.
0+22.5 END RAD.
0+28.5 BEGIN WK.
0+34.5 END WK., BEG. DR. TAPER
0+38 R/W LINE NO. OF BASELINE
0+78 R/W LINE SO. OF BASELINE
END DR. TAPER

$\Delta = 88^{\circ}40'08''$
 $R = 20.00'$
 $L = 31.30'$

$\Delta = 90^{\circ}08'12''$
 $R = 20.00'$
 $L = 31.47'$

AREA TO BE REMOVED.

NOTES:

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TOP HUBGUARD, N.W. COR. BRIDGE, BUILT 1993.

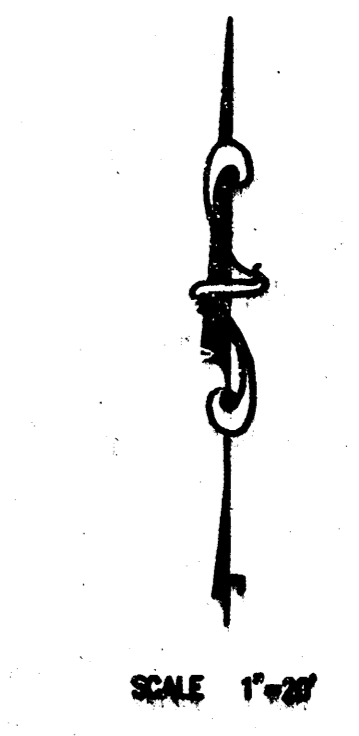
IRONS WERE REPLACED BY FENCE CORNER POSTS. IT IS O.K. TO USE THE FENCE POSTS FOR THE LAYOUT OF THIS PROJECT.

BASELINE IS PARALLEL & 350' NO. OF S.L. OF N.W. 1/4 SEC. 20, TWP. 27 S., R.1 W. OR ALONG THE CHAIN LINK FC. RUNNING E-W.

0+00 IS AT THE H.E. OF THE EAST CB. & G. OF MAIZE RD.

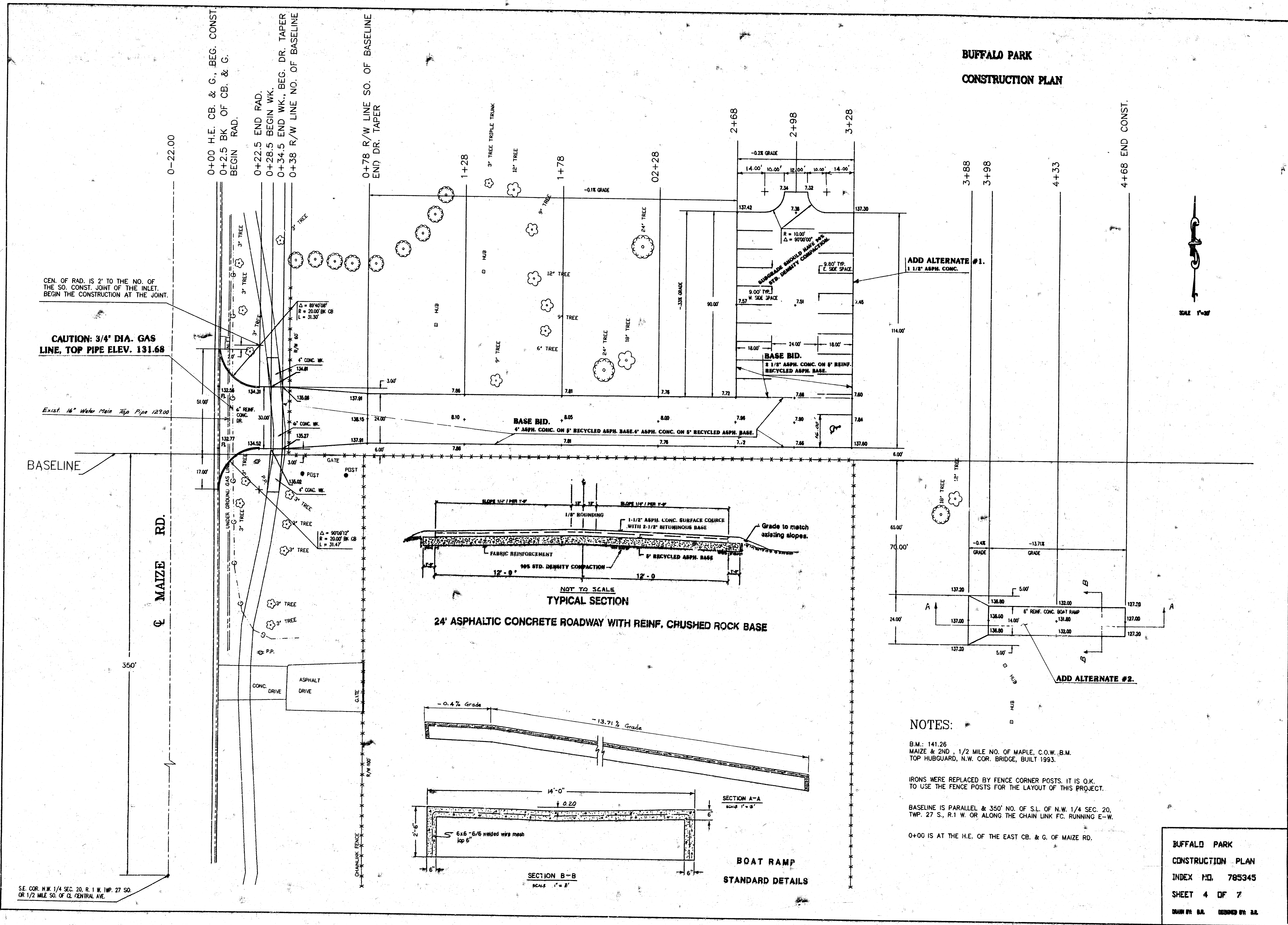
CHAIN LINK FENCE IS REMOVED & STORED PRIOR TO THE START OF THE CONSTRUCTION BY THE PARK BOARD. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PLACE TEMPORARY BARRIERS TO PREVENT THE ACCESS THE PARK. ONCE THE CONSTRUCTION IS COMPLETED, PARK DEPARTMENT WILL INSTALL BACK THE CHAIN LINK FENCE. AT THIS TIME TEMPORARY BARRIERS ARE RETURNED TO THE CONTRACTOR. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE PARK BOARD AT 268-4179 IN ADVANCE OF THE CONSTRUCTION TO ARRANGE FOR FENCE REMOVAL. THE 30' OF THE CHAIN FENCE ACROSS THE NEW ACCESS ROAD WILL BE REPLACED WITH CHAIN LINK GATE.

SE. COR. N.W. 1/4 SEC. 20, R. 1 W. TWP. 27 S. OR 1/2 MILE SO. OF CENTRAL AVE.



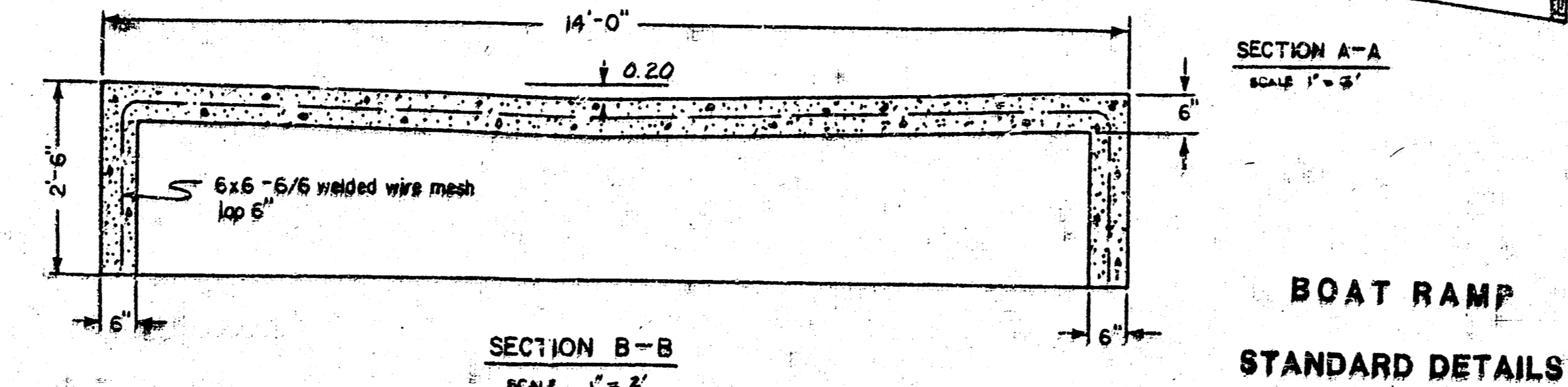
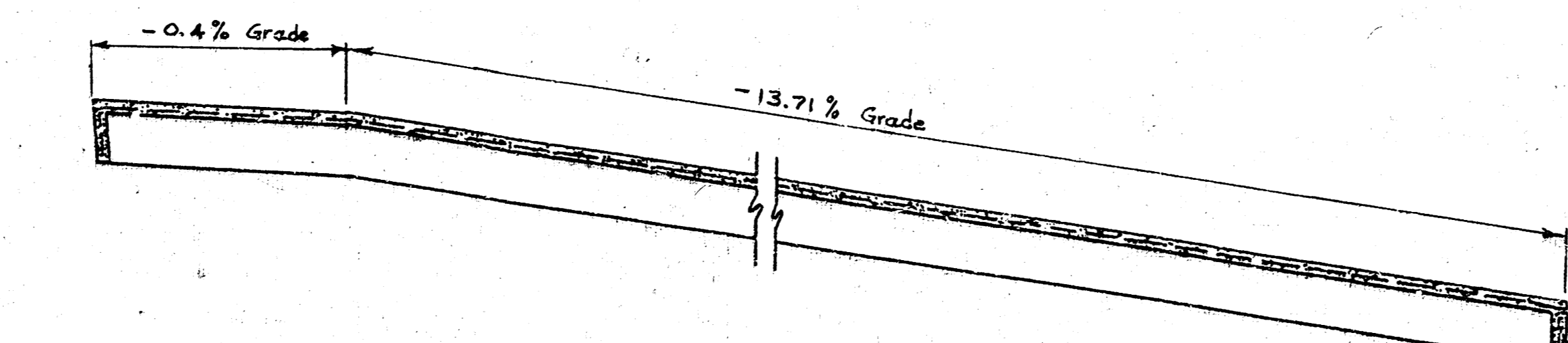
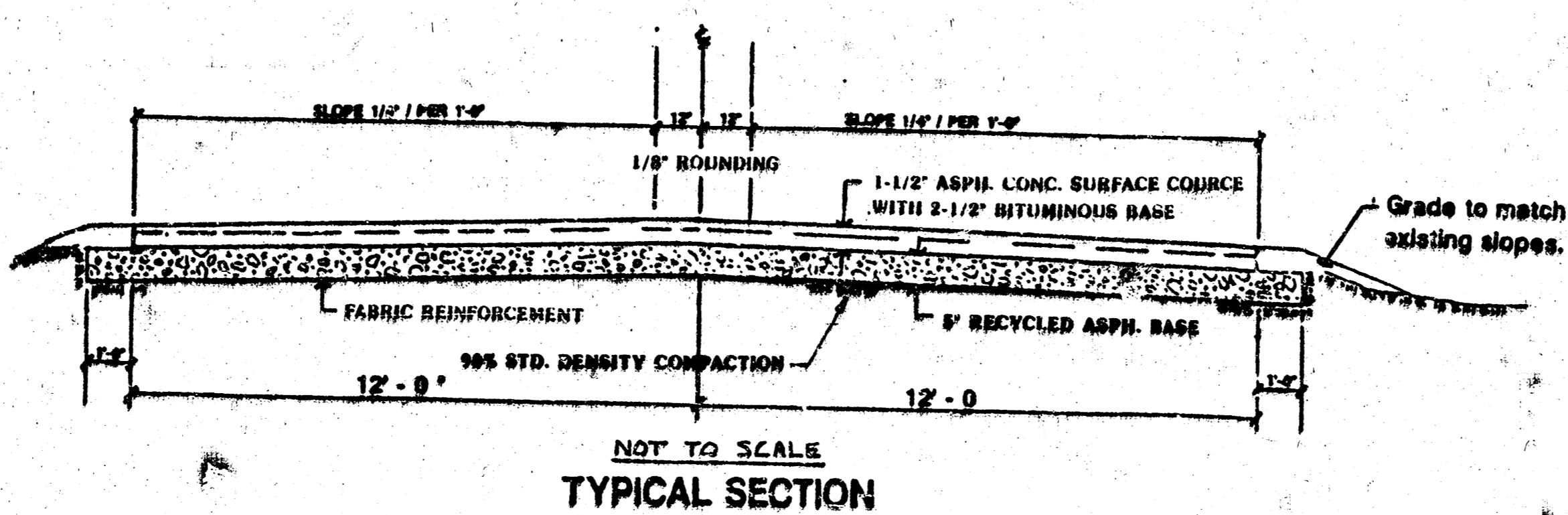
BUFFALO PARK
REMOVAL PLAN
INDEX NO. 765345
SHEET 3 OF 7
DRAWN BY: [unclear] CHECKED BY: [unclear]

**BUFFALO PARK
CONSTRUCTION PLAN**



CEN. OF RAD. IS 2' TO THE NO. OF THE SO. CONST. JOINT OF THE INLET. BEGIN THE CONSTRUCTION AT THE JOINT.

CAUTION: 3/4" DIA. GAS LINE, TOP PIPE ELEV. 131.68



NOTES:

B.M.: 141.26
MAIZE & 2ND, 1/2 MILE NO. OF MAPLE, C.O.W. B.M.
TOP HUBGUARD, N.W. COR. BRIDGE, BUILT 1993.

IRONS WERE REPLACED BY FENCE CORNER POSTS. IT IS O.K. TO USE THE FENCE POSTS FOR THE LAYOUT OF THIS PROJECT.

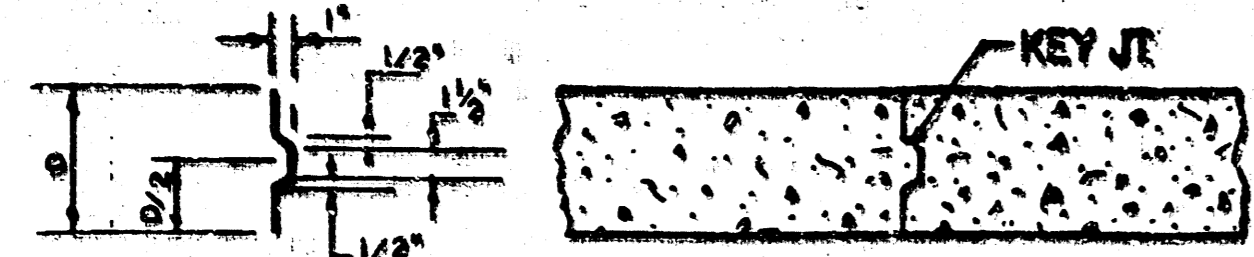
BASELINE IS PARALLEL & 350' NO. OF S.L. OF N.W. 1/4 SEC. 20, TWP. 27 S., R.1 W. OR ALONG THE CHAIN LINK FC. RUNNING E-W.

0+00 IS AT THE H.E. OF THE EAST CB. & G. OF MAIZE RD.

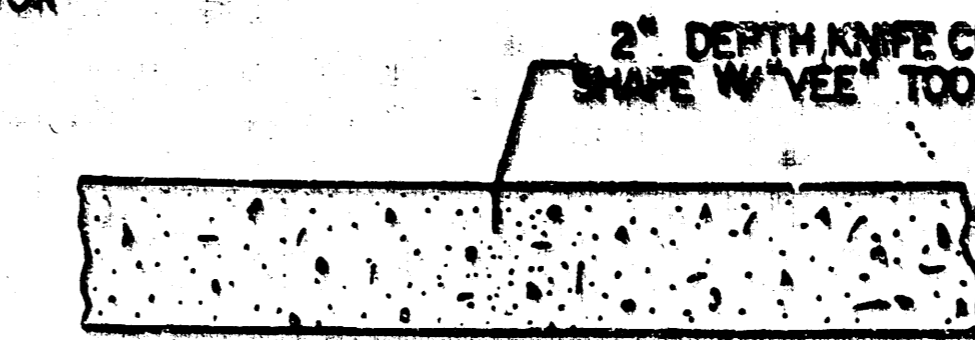


**BUFFALO PARK
CONSTRUCTION PLAN
INDEX NO. 785345
SHEET 4 OF 7
DRAWN BY: [] DESIGNED BY: []**

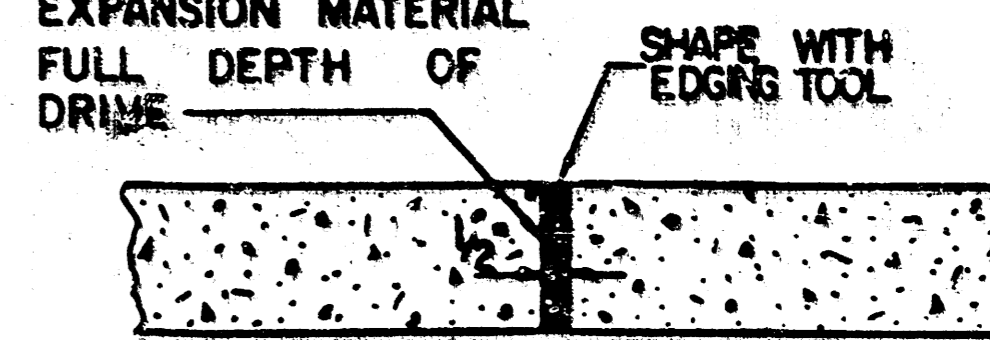
S.E. COR. N.W. 1/4 SEC. 20, R.1 W. TWP. 27 SO. OR 1/2 MILE SO. OF CL. CENTRAL AVE.



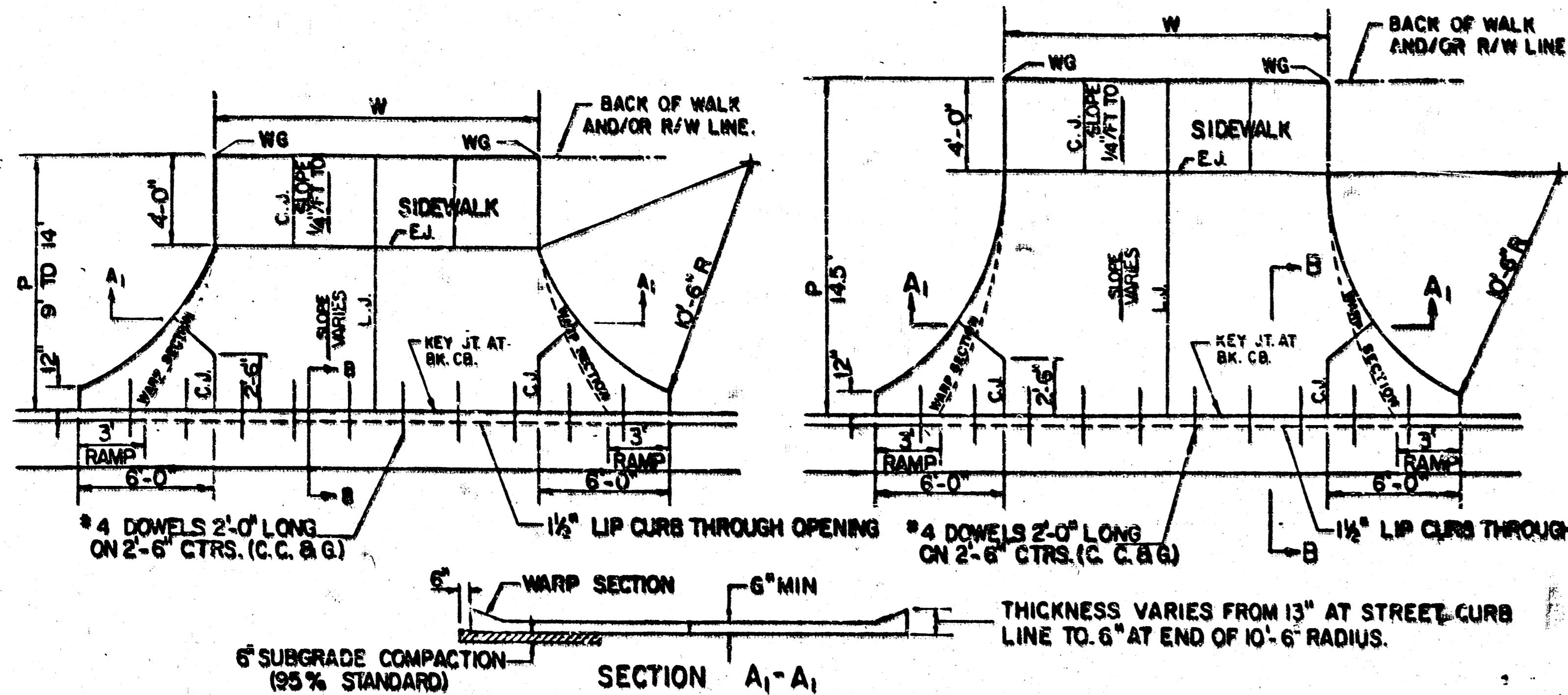
ALT. LONGITUDINAL CONSTRUCTION JOINT



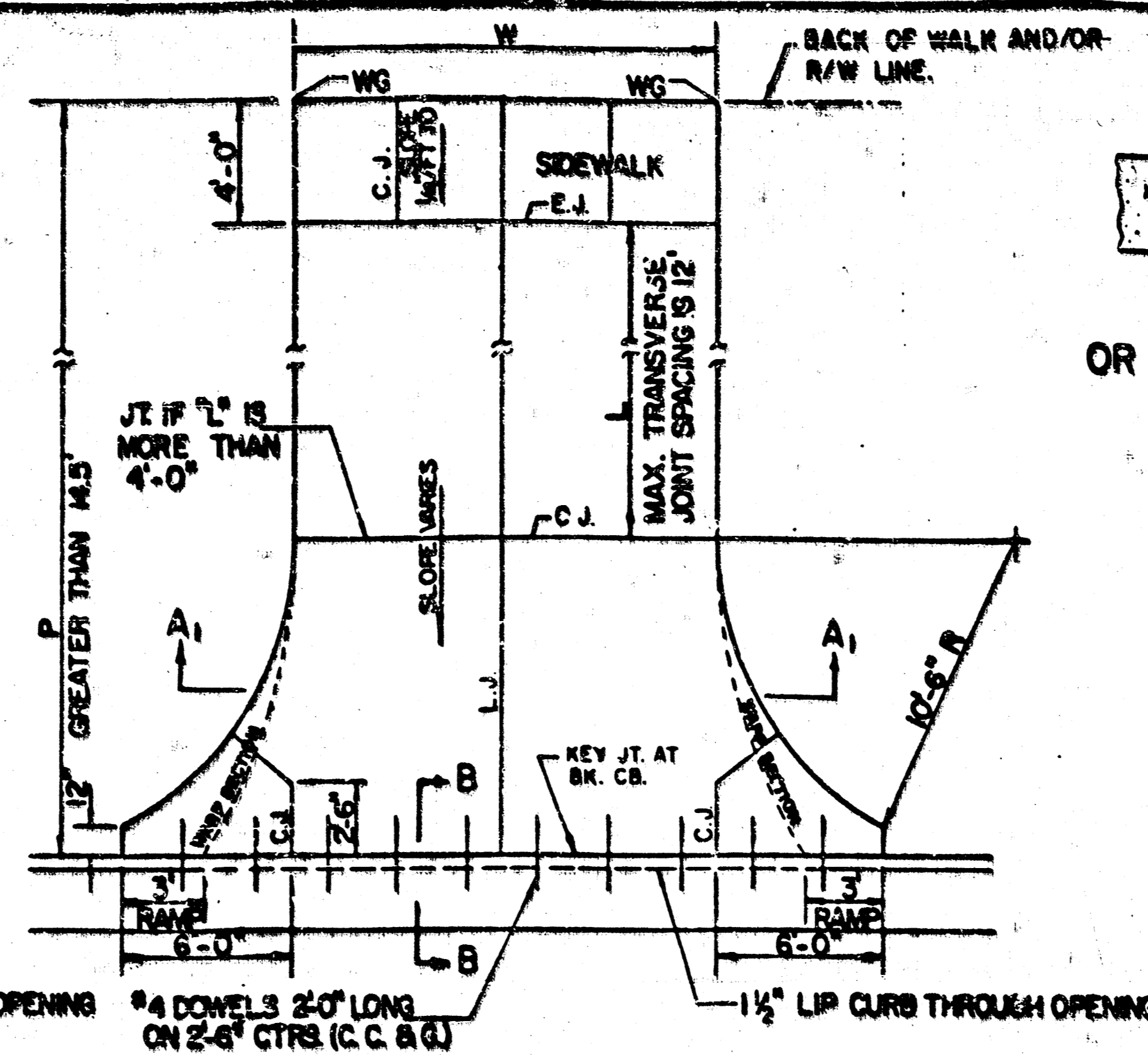
CONTRACTION JOINT (C.J.) OR LONGITUDINAL JOINT (L.J.) NO SAWN JOINTS WILL BE ALLOWED.



EXPANSION JOINT (E.J.)



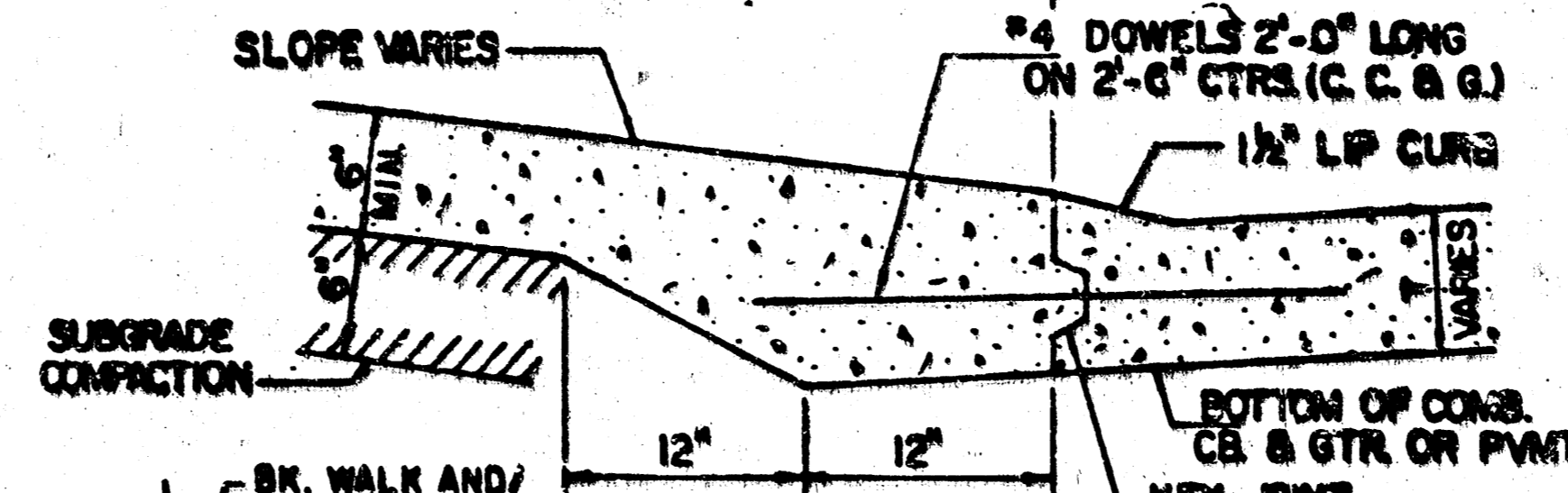
SECTION A1-A1



SECTION A2-A2

PARKING WIDTH "P"	9'	10'	11'	12'	13'	14.5'	20'	25'	30'	35'	40'	45'	50'
ABSOLUTE MAX. DIST. OF PT. "WG" ABOVE OR BELOW TOP OF FULL CURB	0.27	0.27	0.32	0.37	0.52	0.80	1.35	1.8	2.35	2.85	3.35	3.83	4.35
OPTIMUM MAX. DIST. OF PT. "WG" ABOVE OR BELOW TOP OF FULL CURB	0.27	0.27	0.32	0.37	0.52	0.80	1.23	1.48	1.74	2.00	2.28	2.52	2.82
OPTIMUM MIN. DIST. OF PT. "WG" ABOVE OR BELOW TOP OF FULL CURB	0.19	0.21	0.23	0.25	0.27	0.30	0.42	0.52	0.62	0.72	0.82	0.92	1.02
ABSOLUTE MIN. DIST. OF PT. "WG" ABOVE OR BELOW TOP OF FULL CURB	-1.9	-1.8	-1.3	-1.0	-0.8	0.00	0.00	0.15	0.25	0.35	0.45	0.55	0.65

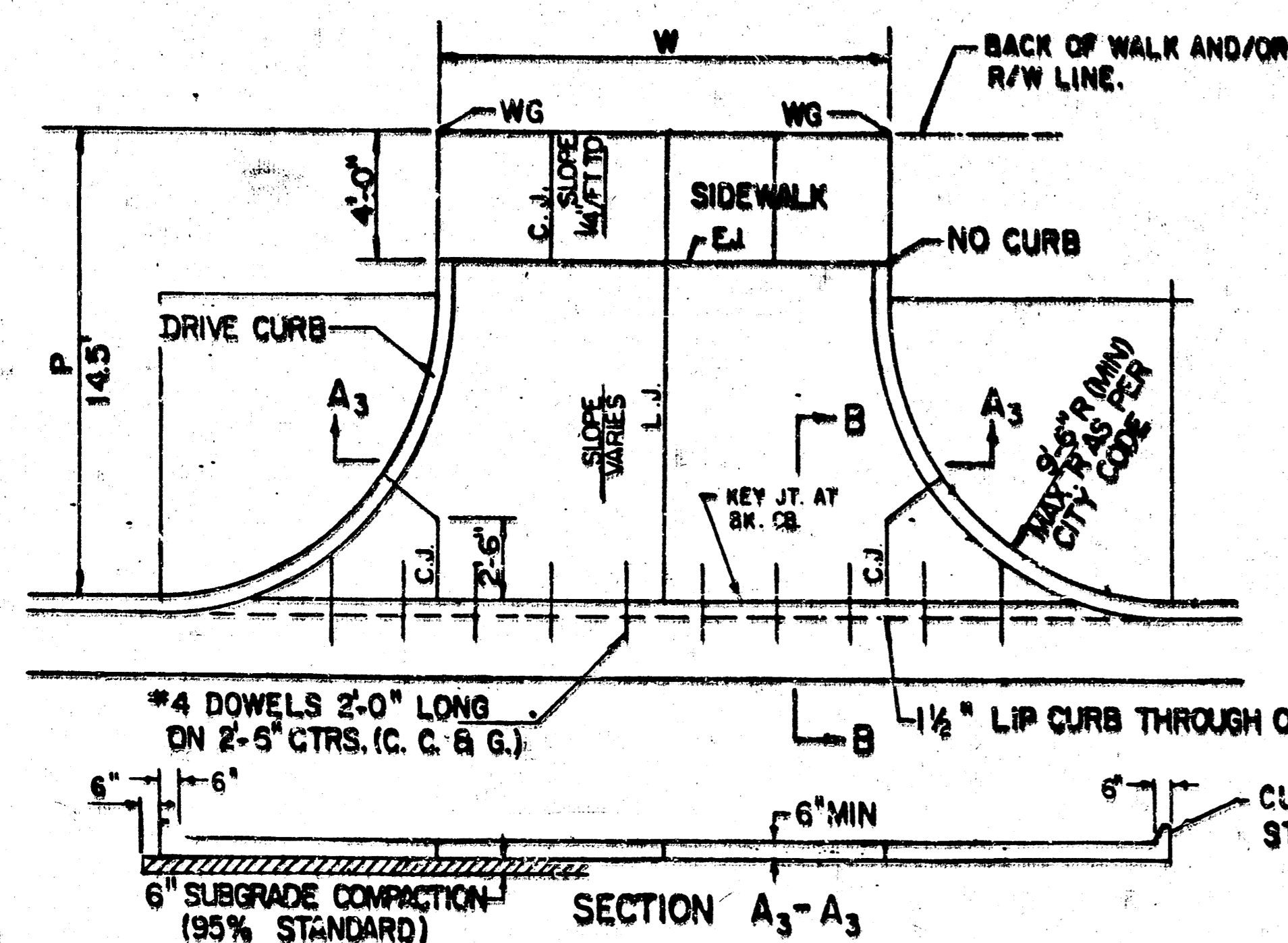
RADIUS RAMP DRIVES (P=9.0' & GREATER)



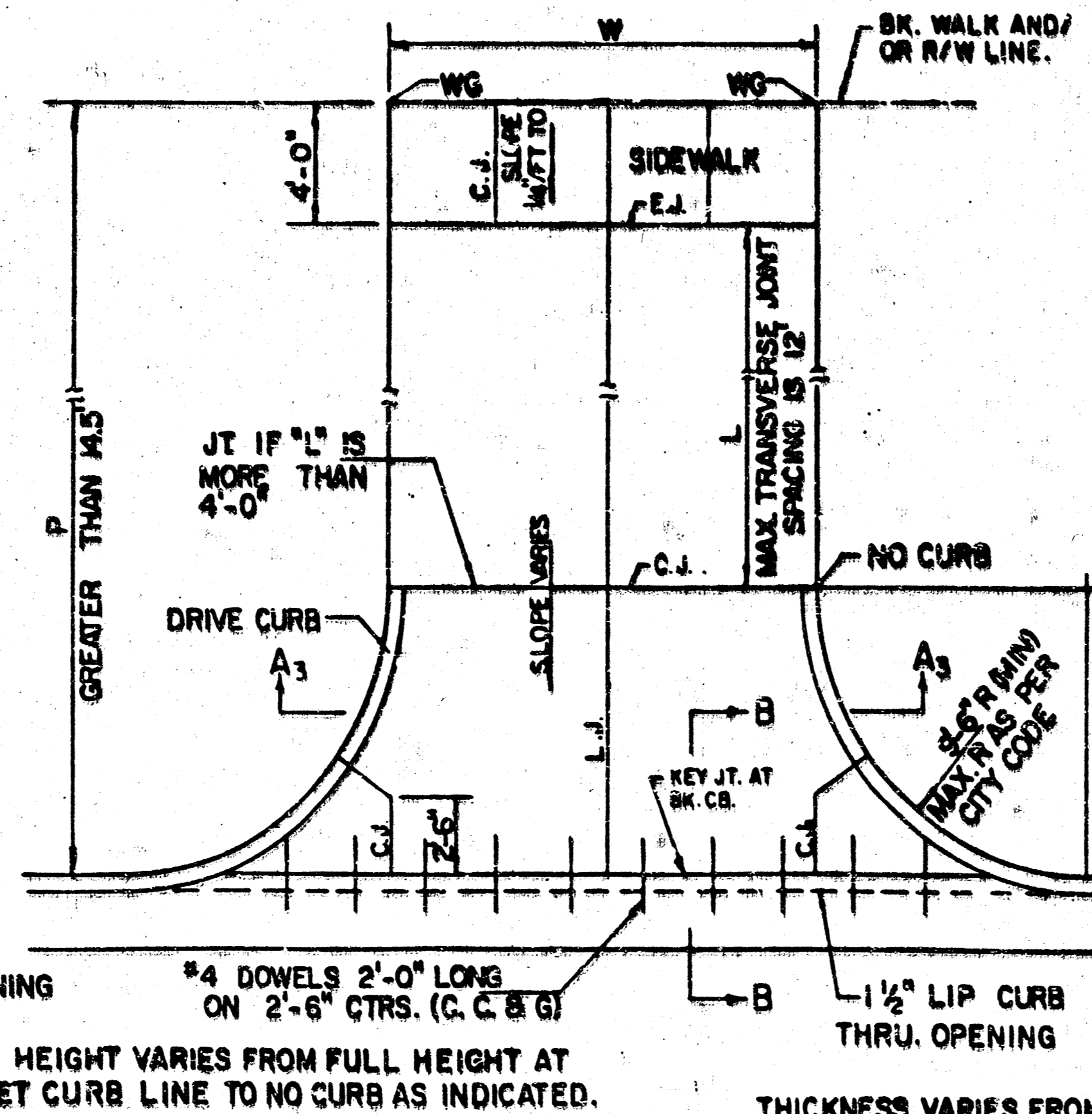
BACK OF CURB DETAIL SECTION B-B

PARKING WIDTH "P"	4'	4.5'	5'	5.5'	6'	6.5'
DIST. OF PT. "1" ABOVE TOP OF FULL CB.	0.08	0.09	0.10	0.12	0.13	0.14
DIST. OF PT. "2" BELOW TOP OF FULL CB.	-0.34	-0.32	-0.30	-0.28	-0.26	-0.22

FULL RAMP DRIVE (P=4.0' TO 6.5')



SECTION A3-A3



SECTION A4-A4

PARKING WIDTH "P"	14.5'	20'	25'	30'	35'	40'	45'	50'
ABSOLUTE MAX. DIST. OF PT. "WG" ABOVE TOP OF FULL CB.	0.72	1.27	1.77	2.27	2.77	3.27	3.77	4.27
OPTIMUM MAX. DIST. OF PT. "WG" ABOVE TOP OF FULL CB.	0.70	1.04	1.30	1.56	1.82	2.08	2.34	2.60
OPTIMUM MIN. DIST. OF PT. "WG" ABOVE TOP OF FULL CB.	0.30	0.42	0.52	0.62	0.72	0.82	0.92	1.02
ABSOLUTE MIN. DIST. OF PT. "WG" ABOVE TOP OF FULL CB.	0.00	0.00	0.15	0.25	0.35	0.45	0.55	0.65

FULL RADIUS DRIVES (P=14.5' & GREATER)

PARKING WIDTH "P"	7'	7.5'	8'	8.5'
ABSOLUTE MAX. DIST. OF PT. "WG" ABOVE TOP OF FULL CB.	0.08	0.02	0.18	0.22
OPTIMUM MAX. DIST. OF PT. "WG" ABOVE TOP OF FULL CB.	0.08	0.02	0.18	0.22
OPTIMUM MIN. DIST. OF PT. "WG" BELOW TOP OF FULL CB.	-0.15	-0.16	-0.17	-0.17
ABSOLUTE MIN. DIST. OF PT. "WG" BELOW TOP OF FULL CB.	-0.25	-0.20	-0.20	-0.20

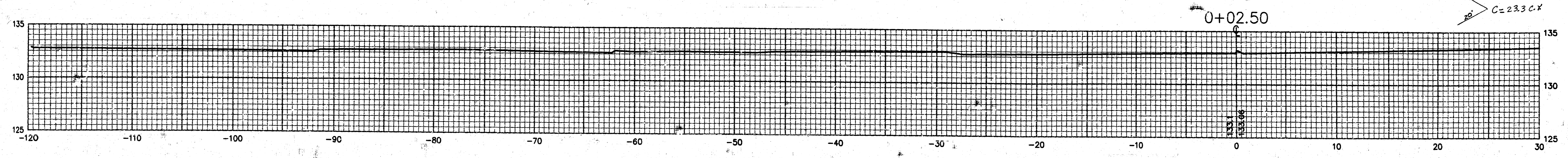
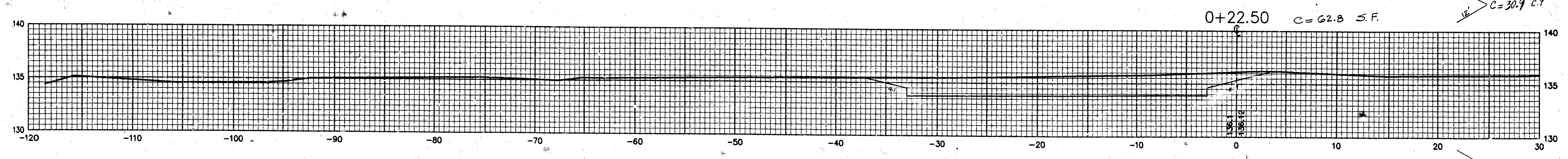
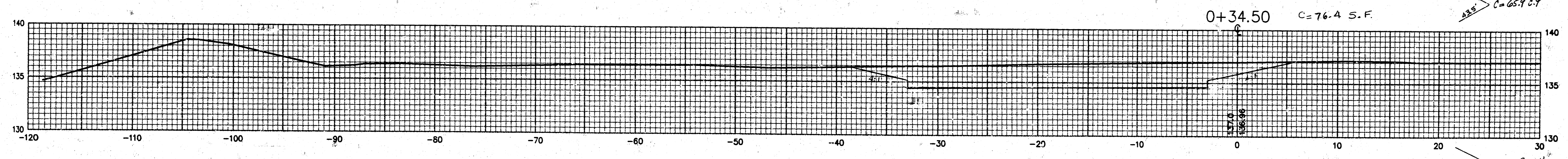
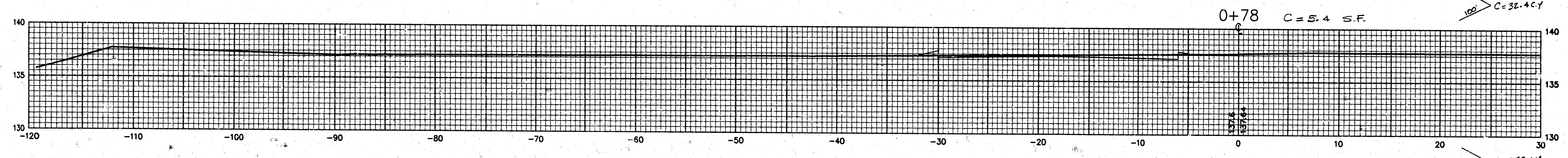
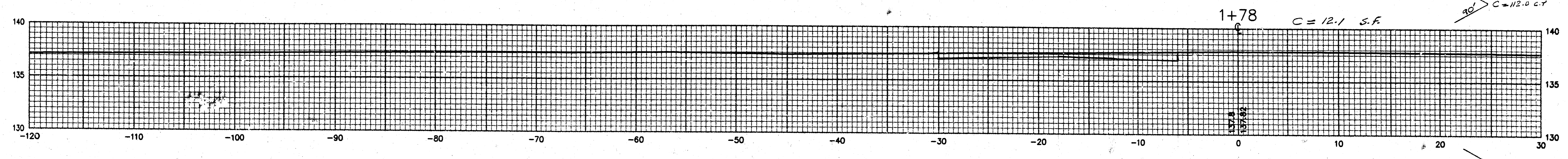
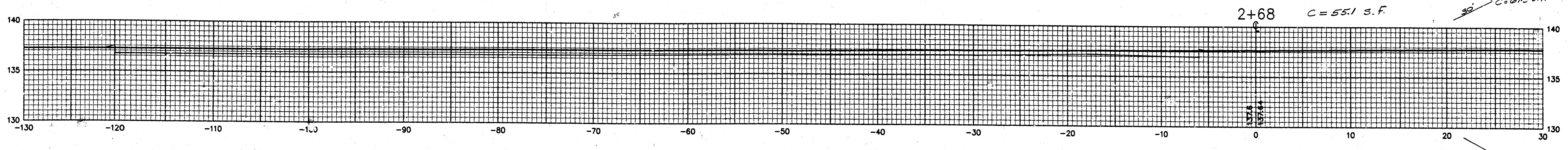
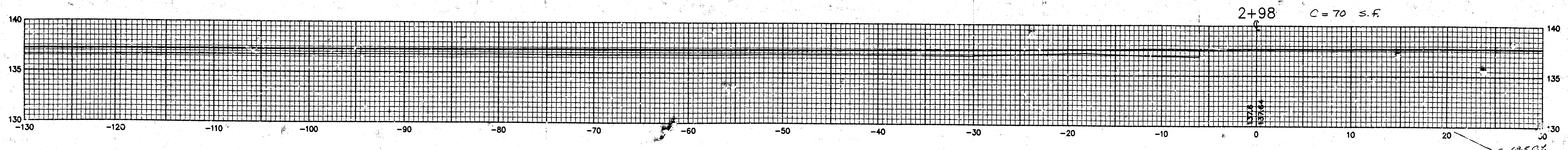
FULL RAMP DRIVE (P=7.0' TO 8.5')

- GENERAL NOTES
- DRIVEWAY CONSTRUCTION DETAILED ON THIS SHEET IS FOR USE WITH FULL HEIGHT STREET CURBS AND IN AREAS WITHOUT FULL WALK CONSTRUCTION IN THE PARKING. SEE OTHER DETAIL SHEETS FOR DRIVEWAY CONSTRUCTION WITH ROLL CURB AND/OR FULL WALK.
 - ONE LONGITUDINAL JOINT SHALL BE CONSTRUCTED ALONG THE CENTERLINE OF DRIVES HAVING A "P" DIMENSION OF 24' OR LESS. TWO LONGITUDINAL JOINTS SHALL BE CONSTRUCTED WITH EQUAL SPACINGS NOT TO EXCEED 10' FOR DRIVES WITH A "P" DIMENSION GREATER THAN 24'.
 - DRIVEWAY WIDTH DENOTED AS "W" ON THE DETAIL DRAWINGS SHALL BE A MINIMUM OF 10' AND A MAXIMUM OF 30'. THE MAXIMUM OPENING FOR RADIUS TYPE DRIVES WITH CURBS THROUGH THE RADIUS SHALL NOT EXCEED 52' AT THE STREET CURB LINE.
 - CONTRACTION JOINT SPACING IN THE DRIVEWAY WALK SECTION SHALL BE A MINIMUM OF 3' AND A MAXIMUM OF 6' AND ARE TO BE EQUALLY SPACED WITHIN THIS RANGE. WALK SECTION SHALL BE CONSTRUCTED TO THE SAME THICKNESS AS THE DRIVEWAY.
 - CONCRETE BARS SHALL BE OMITTED FROM THE KEVED CONSTRUCTION JOINT ALONG THE BACK OF THE STREET CURB LINE WHEN DRIVEWAYS ARE CONSTRUCTED IN CONJUNCTION WITH NEW CONCRETE PAVEMENT CONSTRUCTION.
 - ADDITIONAL THICKNESS OF DRIVE AS INDICATED IN THE DRAWINGS WILL NOT BE PAID FOR DIRECTLY AND THIS COST SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE DRIVEWAY CONSTRUCTION.
 - ONE HALF INCH EXPANSION JOINTS SHALL BE INSTALLED WHEREVER DRIVE CONSTRUCTION ADJUTS SIDEWALK. ONE HALF INCH EXPANSION JOINTS SHALL ALSO BE INSTALLED ALONG THE PROPERTY LINE AND/OR BACK OF WALK LINE WHEN DRIVE CONSTRUCTION ALONG THIS LINE ADJUTS CONCRETE PARKING LOTS OR CONCRETE DRIVE EXTENSION.
 - ALL DRIVEWAYS SHALL BE A MINIMUM OF 6" IN THICKNESS AND SHALL BE WITHOUT REINFORCEMENT. DRIVEWAYS MAY BE CONSTRUCTED THICKER THAN 6" AND THEY MAY BE REINFORCED WITH 6"x12" #4-#4 HELDED WIRE FABRIC WHEN PROPERLY AUTHORIZED BY THE PROPERTY OWNER WITH THE ENGINEER'S CONCLURANCE.
 - OPTIMUM DRIVEWAY ELEVATIONS SHOWN IN THE TABLES ARE TO BE USED WHENEVER POSSIBLE. ABSOLUTE MAXIMUM AND MINIMUM ELEVATIONS ARE TO BE USED ONLY WHEN THESE VALUES WILL PERMIT NEW CONSTRUCTION TO MATCH EXISTING DRIVES OR PARKING LOTS. VALUES SHOWN IN THE TABLES ARE BASED ON A FULL CURB HEIGHT ELEVATION OF 0.55' ABOVE THE GUTTER FLOW LINE AND MUST BE ADJUSTED ACCORDINGLY FOR OTHER CURB HEIGHTS. VALUES SHOWN IN THE TABLES WITH MINUS SIGNS INDICATE ELEVATIONS BELOW TOP OF FULL HEIGHT CURB.

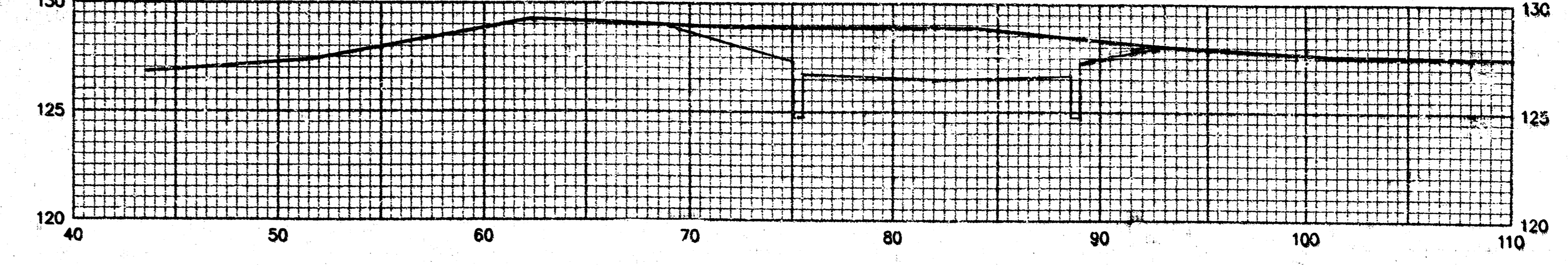
REVISED APRIL 1994 (JKB)
SCALE: 1"=5'

STANDARD DRIVE ENTRANCES
FULL HEIGHT CURB
CITY OF WICHITA, KANSAS
PROJECT NUMBER
INDEX No # 785335 SHEET 5 OF 7

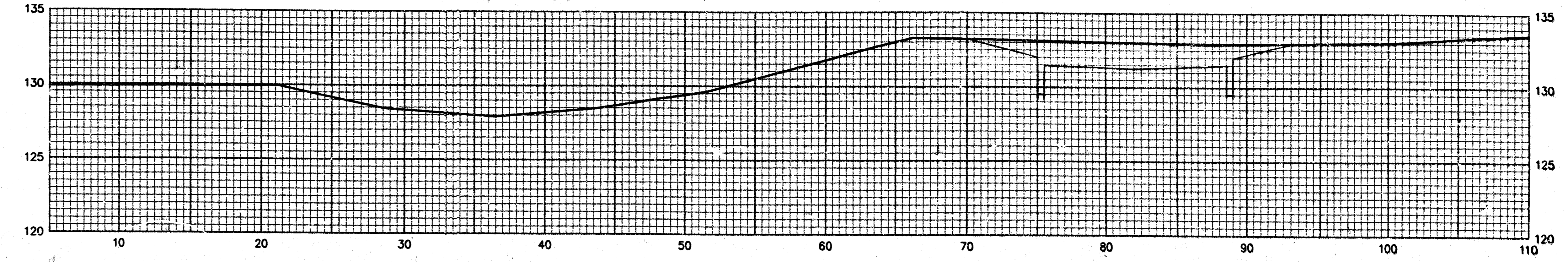
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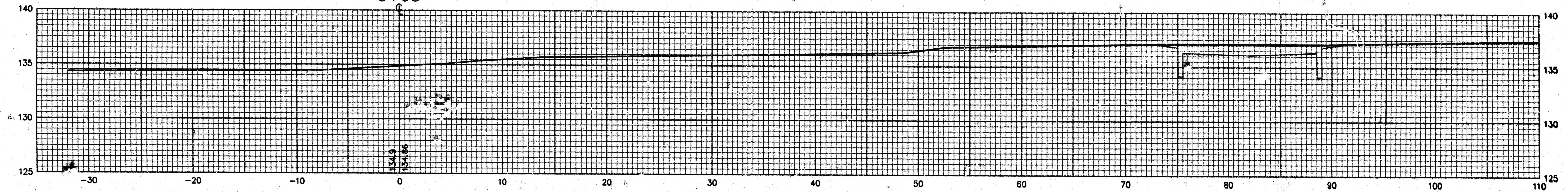
4+68



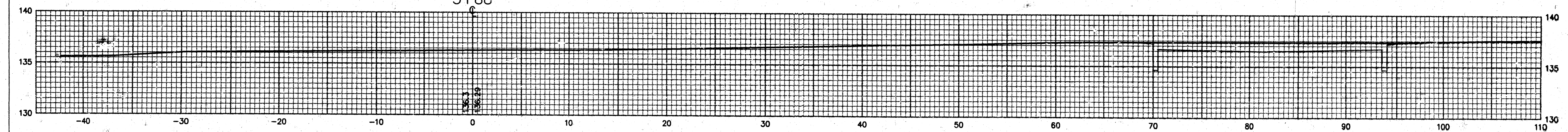
4+33



3+98

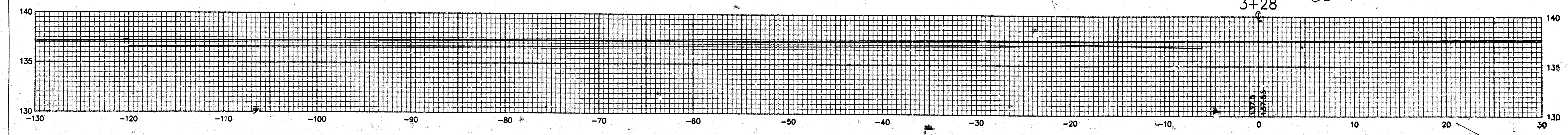


3+88



3+28

C = 69.3 SF



Total Cut
For drive & High Area = 411 CY

30' C = 77.4 CY

BUFFALO PARK
SHEET 7 OF 7

10-1-4-2