CONSTRUCTION PLANS

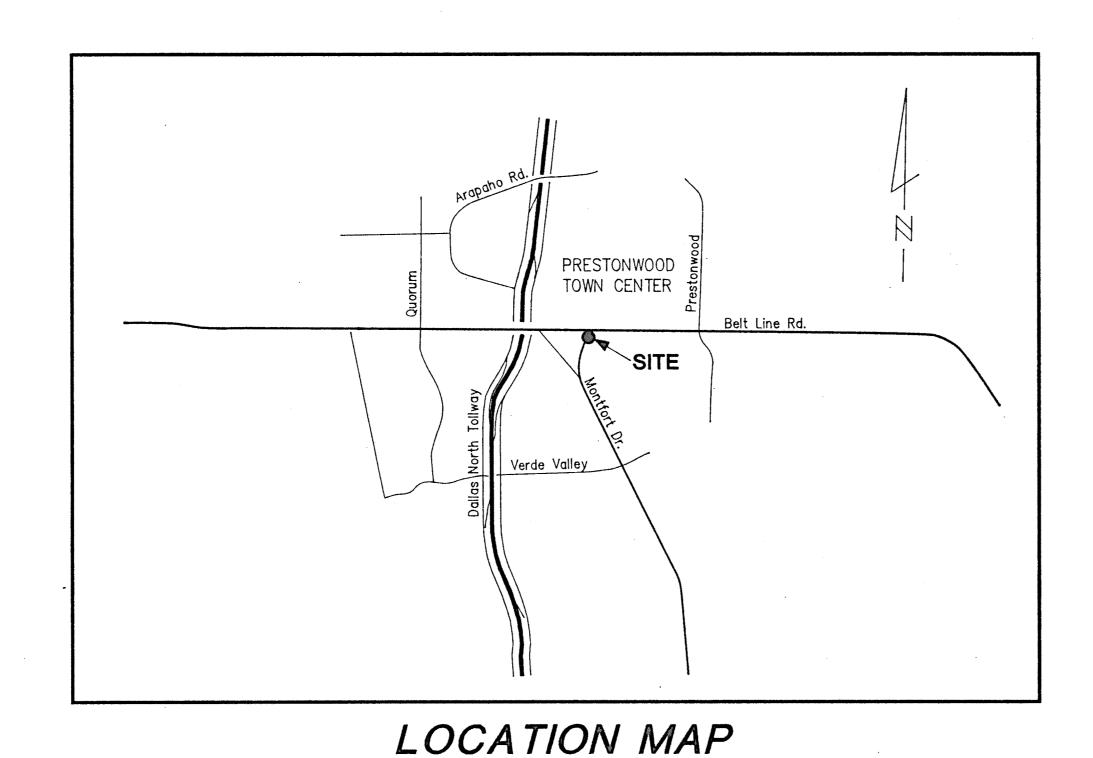
FOR

MONTFORT DRIVE - RIGHT TURN LANE

AT

MONTFORT DRIVE AND BELT LINE ROAD

JANUARY 1994



PREPARED BY:

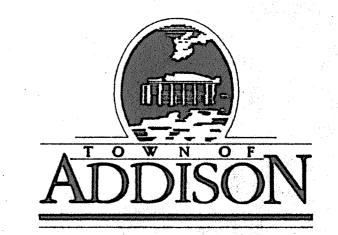
Barton-Aschman Associates, Inc.

Barton—Aschman Associates, Inc. 5485 Belt Line Rd. #199 Dallas, Texas 75240 (214) 991—1900

INDEX FOR SHEETS

SHEET NO.	DESCRIPTION					
l	COVER SHEET					
2	GENERAL NOTES, ESTIMATES QUANTITIES AND MISC. DETAILS					
3-5	DETAILS					
6	TRAFFIC CONTROL PLAN					
7	REMOVAL ITEMS					
8	PROPOSED R.O.W.					
9	PLAN AND PROFILE					
10	PAVEMENT MARKINGS					
11	LANDSCAPING					
12-13	CROSS SECTIONS					

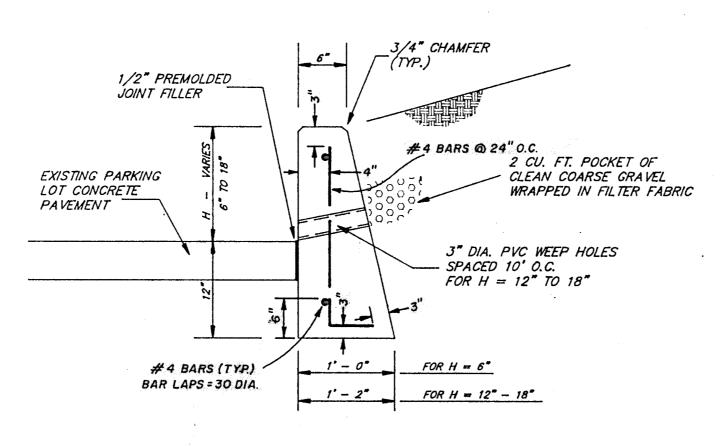
PREPARED FOR :



CONSTRUCTION SET ISSUED BY TOWN OF ADDISON PUBLIC WORKS DEPARTMENT

QUANTITY SUMMARY

ITEM			
NO.	DESCRIPTION	UNIT	QUAN
	MOBILIZA TION	<u> </u>	1
2	REMOVE CONC. PAVEMENT, DRIVE, AND APRON	SY	410
3	REMOVE CONCRETE SIDEWALK	SF	1000
4	LIME STABILIZATION BASE COURSE	SY	450
5	HYDRATED LIME	TON	6
6	UNCLASSIFIED STREET EXCAVATION	CY	80
7	8" - 3000 psi REINFORCED CONCRETE PAVEMENT	SY	400
8	4" - 3000 psi REINFORCED CONCRETE SIDEWALK	SF	1300
9	SAWED BREAKOUT (FULL DEPTH)	LF	800
10	6" - 3000 psi INTEGRAL CURB	LF	350
11	TYPE 4 RETAINING WALL	CY	18
12	CLEARING AND GRUBBING	LS	1
13	BARRICADING, SIGNING AND TRAFFIC MAINTENANCE	LS	1
14	IRRIGATION REMOVAL AND REINSTALLATION	LS	1
15	BARRIER-FREE RAMP	EA	4
16	DECORATIVE WALL MODIFICATION	LS	1
17	PARKING AREA PAVEMENT (3000 psi)	SY	60
18	6" - 3000 psi REINFORCED CONCRETE DIRVEWAY	SY	42
19	THIS ITEM LEFT BLANK		
20	TRAFFIC SIGNAL SYSTEM MODIFICATIONS	LS	1
21	TRAFFIC PAVEMENT MARKINGS	LS	1
22	6" x 6" REFLECTIVE JIGGLE BARS	EA	23
23	P-7W (4") WHITE NON-REFLECTIVE BUTTONS	EA	74
24	DIRECTIONAL SIGNS	EA	4
25	PARKING LOT STRIPING	LS	1
26	SELECT BORROW	CY	60
27	DEMOLITION OF EXISTING LANDSCAPING	LS	7
28	DWARF BURFORD HOLLY (5 gal.)	EA	90
29	CLEVELAND SELECT PEAR (4"cal.)	EA	6
30	ASIAN JASMINE (4"pots)	EA	1233
31	SEASONAL COLOR (4"pots)	EA	1577
32	EROSION NETTING	SF	990
33	BED PREPARATION	SF	3300
~~	TOP DRESS MULCH	SF	3300



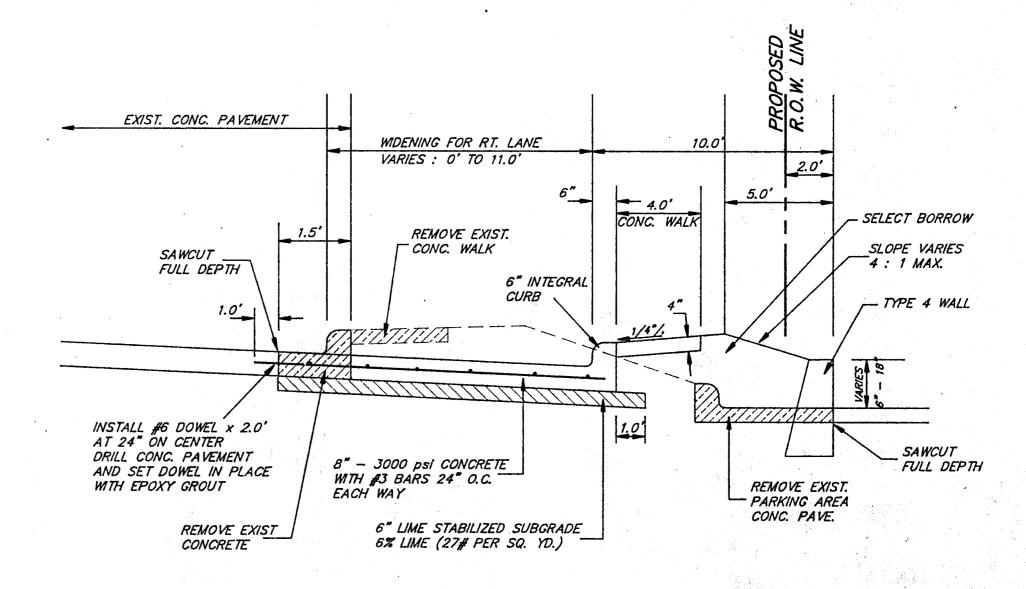
TYPE 4 RETAINING WALL

GENERAL NOTES

- 1. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE TOWN OF ADDISON STANDARDS AND SPECIFICATIONS AND THE NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS (N.C.T.C.O.G.) STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, EXCEPT AS NOTED. IN THE EVENT OF A CONFLICT, THE TOWN OF ADDISON STANDARDS AND SPECIFICATIONS SHALL GOVERN.
- 2. ALL LOCATIONS OF UNDERGROUND UTILITY LINES ARE APPROXIMATE.
 CONTRACTOR SHALL NOTIFY ALL APPLICABLE UTILITY COMPANIES 48 HOURS
 PRIOR TO CONSTRUCTION SO THAT UNDERGROUND LINES CAN BE MARKED.

 TOWN OF ADDISON
 SOUTHWESTERN BELL
 TU ELECTRIC

 STORER CABLE
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PUBLIC SAFETY DURING CONSTRUCTION AND WILL PROVIDE THE NECESSARY TRAFFIC BARRICADES AND WARNING SIGNAGE TO PROTECT THEE CONSTRUCTION SITE. CONSTRUCTION BARRICADES SHALL BE IN CONFORMANCE WITH THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. IN AREAS WHERE LONG—TERM NIGHTTIME BARRICADES ARE USED, BARRICADES SHOULD INCLUDE HIGH INTENSITY REFLECTIVE SHEETING.
- 4. ALL CONCRETE SHALL HAVE A MINUMUM COMPRESSIVE STRENGTH OF 3000 psi AT 28 DAYS (MINIMUM 6 SACKS OF CEMENT PER CUBIC YARD) UNLESS NOTED OTHERWISE. ALL REINFORCING STEEL AND DOWEL BARS IN PAVEMENT SHALL BE SUPPORTED AND MAINTAINED AT THE CORRECT CLEARANCES BY THE USE OF BAR CHAIRS OR OTHER APPROVED SUPPORT.
- THE CONTRACTOR IS RESPONSIBLE FOR KEEPING STREETS, PARKING AREAS, SIDEWALKS, ETC. ADJACENT TO THE PROJECT FREE OF MUD AND DEBRIS FROM CONSTRUCTION.
- 6. CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR PROTECTION OF PUBLIC UTILITIES IN THE CONSTRUCTION OF THIS PROJECT. ALL MANHOLES, VALVE BOXES, FIRE HYDRANTS, ETC. MUST BE ADJUSTED TO PROPER LINE AND GRADE BY THE CONTRACTOR PRIOR TO AND/OR AFTER PLACING OF PERMANENT PAVING. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR SUPPORT OF EXISTING POLES, STREET SIGNS, ETC. WHEN EXCAVATING IN THE VICINITY OF SUCH
- 7. THE TOWN OF ADDISON PUBLIC WORKS DEPARTMENT IS TO BE NOTIFIED 48 HOURS (2 WORKING DAYS) PRIOR TO ANY CONSTRUCTION OF PAVING AND UTILITIES IN RIGHTS—OF—WAY, EASEMENTS OR ALLEYS.
- 8. ALL DISTURBED EARTH AREAS ARE TO BE FINISH GRADED TOK ORIGINAL OR PROPOSED CONTOURS, FERTILIZED AND BLOCK SODDED WITH BERMUDA SOD ACCORDING TO NCTCOG SPECIFICATIONS IMMEDIATELY AFTER CONSTRUCTION. BACKFILL BEHIND NEW CURB IS TO BE SELECT MATERIAL FREE OF ROCK AND OTHER DEBRIS. CONTRACTOR SHALL THOROUGHLY WATER THE SOD IMMEDIATELY AFTER PLACEMENT. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR CONTINUED MAINTENANCE AND WATERING OF THE NEWLY PLANTED SOD UNTIL THE ENTIRE PROJECT IS COMPLETED AND ACCEPTED BY THE TOWN OF ADDISON. WATERING OF THE BERMUDA SOD SHALL BE DONE IN A MANNER AND QUANTITY AS DIRECTED BY TOWN OF ADDISON INSPECTION PERSONNEL (NO SEPARATE PAY ITEM).
- FILL SHALL BE PLACED IN LIFTS NOT TO EXCEED EIGHT (8) INCHES AND SHALL BE COMPACTED TO A UNIFORM DENSITY OF NOT LESS THAN 95% OF THE MAXIMUM DENSITY AS DETERMINED BY TXDOT TEST METHOD TEX-113.
 ARRANGEMENTS FOR CONSTRUCTION WATER SHALL BE MADE THROUGH THE
- TOWN OF ADDISON.
- 11. CONTRACTOR SHALL MAINTAIN SANITARY FACILITIES FOR USE BY WORKERS THROUGHOUT CONSTRUCTION.
- 12. THE CONTRACTOR IS REQUIRED TO RELOCATE ALL TRAFFIC SIGNAL ITEMS AS SHOWN ON THE PLANS INCLUDING, BUT NOT LIMITED TO, SIGNAL POLES, FOUNDATIONS, CONTROL BOXES, AND ALL OTHER APPURTENANCES. THE CONTRACTOR'S BID PRICE FOR THIS WORK SHALL ALSO INCLUDE SUCH ITEMS AS NEW CONDUITS, ALL WRING AND SPLICING NECESSARY FOR SIGNAL WORK, NEW TRAFFIC DETECTOR LOOPS (IN PAVEMENT) AND ALL WIRING AND SPLICING NECESSARY FOR DETECTOR SYSTEM. NEW LOCATIONS OF CONTROL BOXES, SIGNALS, ETC. SHALL BE AS DIRECTED BY THE TOWN OF ADDISON.
- 13. THE CONTRACTOR SHALL RETAIN A LICENSED IRRIGATOR TO REMOVE, RELOCATE OR REPLACE ALL LANDSCAPING AND SPRINKLER SYSTEMS AFFECTED BY CONSTRUCTION. FIELD VERIFICATION OF EXISTING LANDSCAPING AND LOCATION AND TYPE OF EXISTING IRRIGATION SYSTEMS IS REQUIRED PRIOR TO BIDDING. THIS WORK SHALL BE DIRECTED BY THE TOWN OF ADDISON.
- 14. ALL EXISTING FOUNDATIONS SHALL BE REMOVED BELOW THE LEVEL OF PAVEMENT SUBGRADE.
- 15. THE CONTRACTOR SHALL OBTAIN A RIGHT-OF-WAY PERMIT FROM THE TOWN OF ADDISON.



TYPICAL WIDENING SECTION

BARTON-ASCHMAN ASSOCIATES, INC.



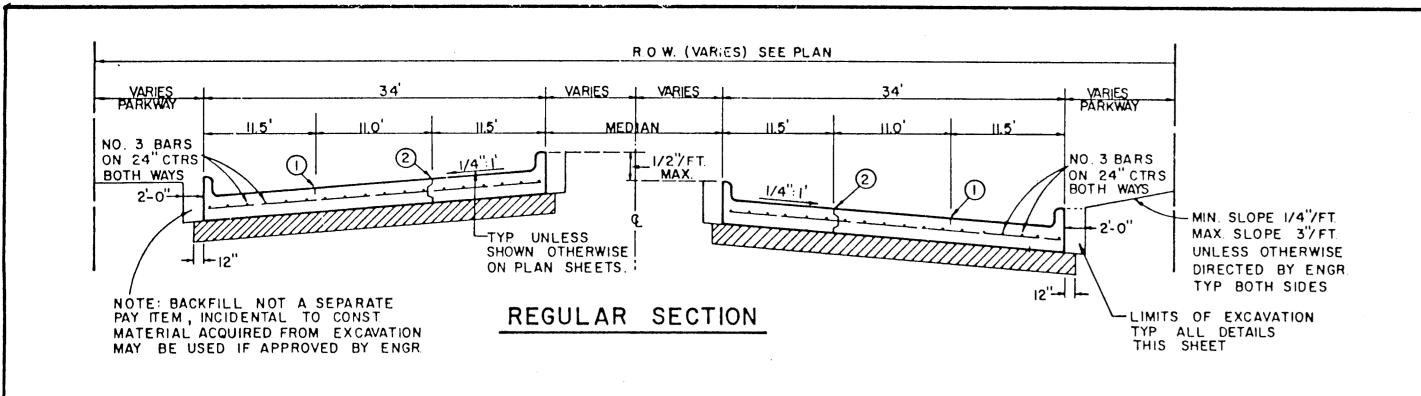
VERAL NOTES, QUANTITIES AND MISC. DETAILS

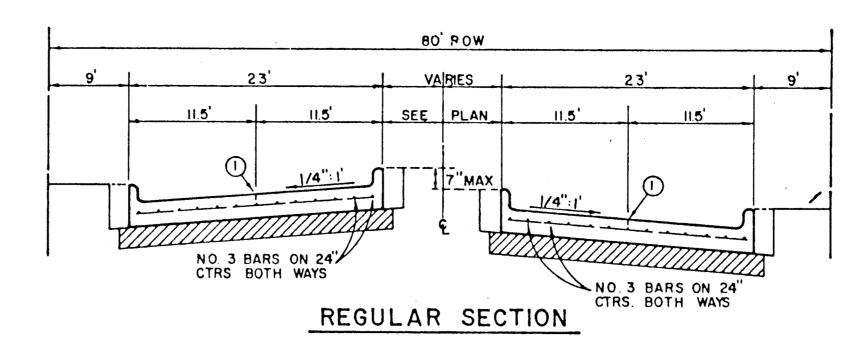
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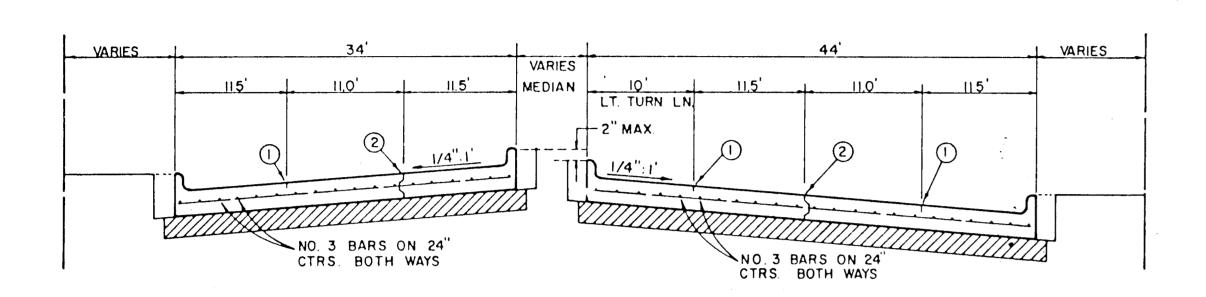
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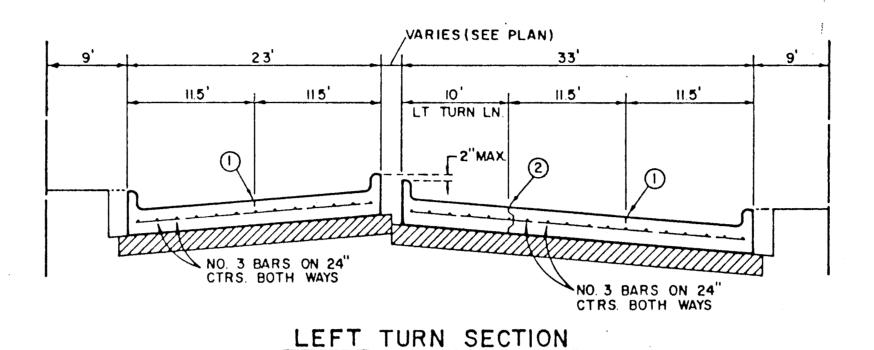
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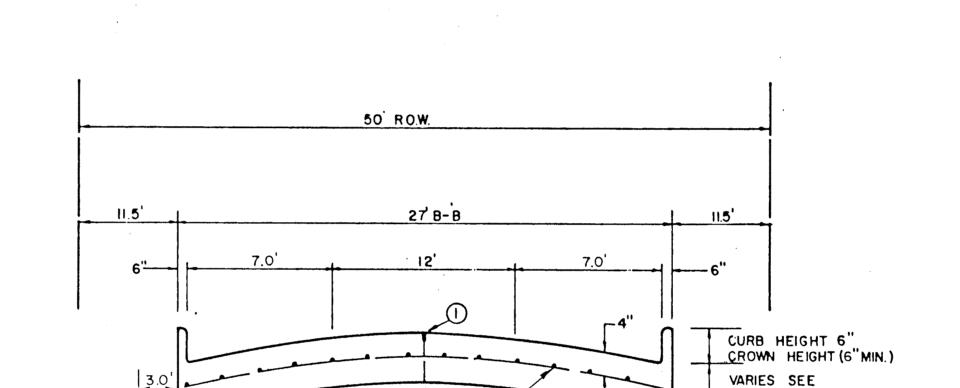


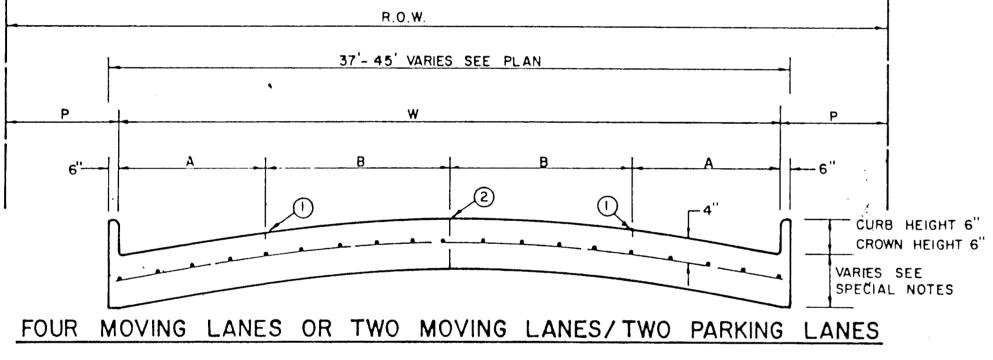




MAJOR ARTERIAL







STREET TYPE	STREET WIDTH (W)	Α	В	ROW WIDTH	Р
COLLECTOR	36'	8'	10'	60,	11 5'
COLLECTOR	40'	8' OR 10'	10'OR 12	60,	9.5
· COLLECTOR	44'	11'	11'	65'	10.0

* FULL WIDTH PAVEMENT OF 36' WIDTH STREETS IS ALLOWED WHERE APPROVED BY THE ENGINEER

LOCAL STREET

STABILIZATION

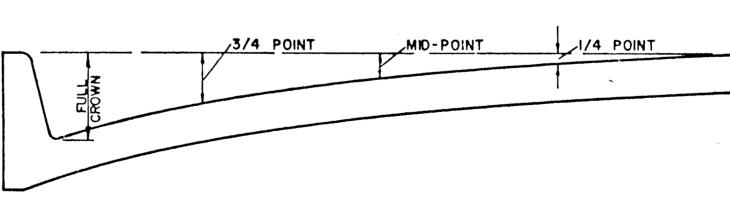
3 BARS ON 18" CENTERS B.W.

ONE MOVING LANE / TWO PARKING LANES

REINFORCED CONCRETE PAVEMENT

ALL REINFORCING BARS SHALL BE NO.3 TRANSVERSE BARS TO BE SPACED ON 1'-6" CENTERS; LONGITUDINAL BARS TO BE SPACED ON 1'-6" EXCEPT WHERE NOTED.

- UNDIVIDED STREETS-PROVIDE 4" DBL.-REF YELLOW & BUTTON P-117-Y PATTERNS TO BE ESTABLISHED BY ENGINEER SEE DETAIL SHEET (1) SAWED LONGITUDINAL DUMMY JOINT
- ② CONSTRUCTION JOINT (FULL WIDTH PVMT IS ALLOWED WHERE APPROVED BY ENGINEER.
- (3) FINISH SHALL BE TRANSVERSE WITH TRAFFIC LANES AND SHALL BE STEEL TINED BROOM FINISH.

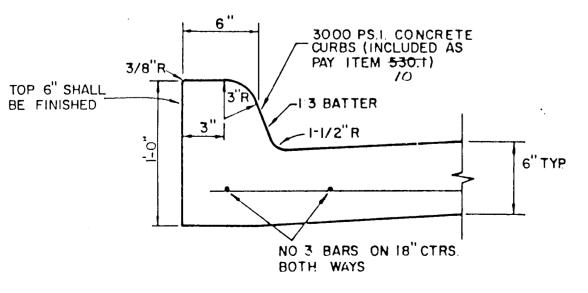


SPECIAL NOTES

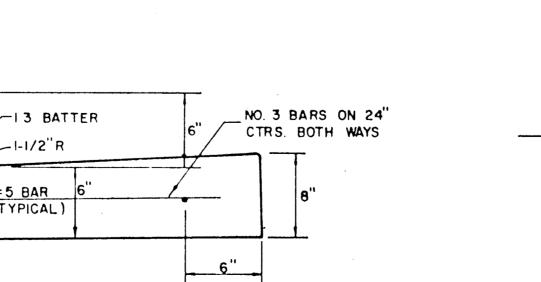
	ROADWAY WIDTH (W)	TOTAL CROWN HEIGHT	3/4 POINT	MID- POINT	1/4 POINT	
[26՝	6"	3-3/8"	1-1/2"	3/8"	—
ĺ	36'	6"	3 – 3/8"	1 - 1/2"	3/8"	
	44'	6"	3 – 3/8"	1-1/2"	3/8"	
	48'	6"	3- 3/8"	1-1/2"	3/8"	

FOR VARIOUS PARABOLIC SECTIONS

COLLECTOR STREET



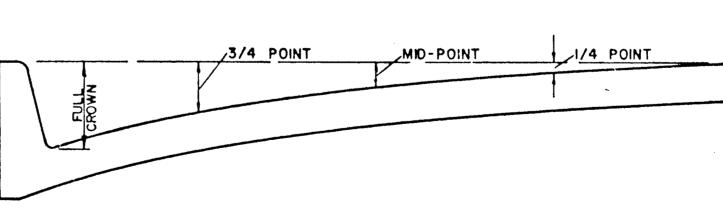
STANDARD CURB



SEPARATE CURB AND GUTTER

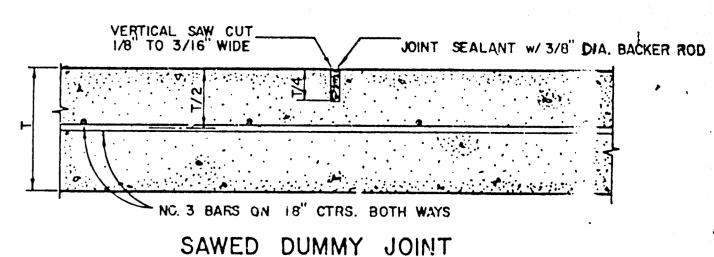
2'-0" (USUAL)

(TYPICAL)



	ROADWAY WIDTH (W)	TOTAL CROWN HEIGHT	3/4 POINT	MID- POINT	1/4 POINT	
. [26'	6"	3-3/8"	1-1/2"	3/8"	_
Ĺ	36'	6"	3-3/8"	1 - 1/2"	3/8"	
	44'	6"	3 – 3/8"	1-1/2"	3/8"	
	48'	6"	3- 3/8"	1-1/2"	3/8"	

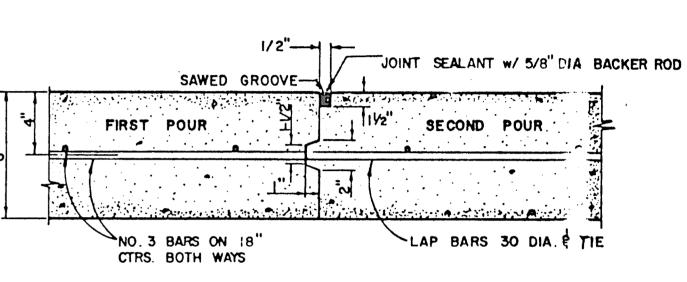
TABLE OF CROWN HEIGHTS AND ORDINATES



JOINT SEALANT W/ 5/8" DIA. BACKER ROD SAWED GROOVE FIRST POUR SECOND POUR

NO. 3 BARS ON 18" LAP BARS 30 DIA. & TIE CTRS. BOTH WAYS

CONSTRUCTION JOINT FOR 6 INCH PAVEMENT



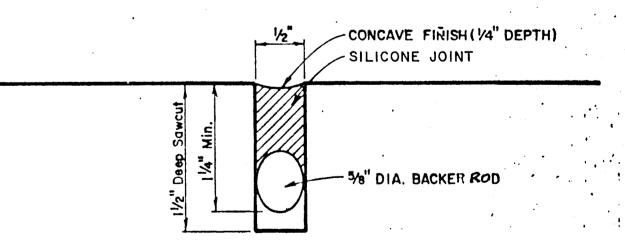
CONSTRUCTION JOINT FOR 8 INCH PAVEMENT

GENERAL NOTES

PAVEMENT THICKNESS FOR STREETS SHALL BE AS SPECIFIED BELOW IN SPECIAL NCTES.

STANDARD SPECIFICATIONS

- REINFORCED CONCRETE PAVEMENTS 1. ALL CURDS SHALL DE PLACED INTEGRAL WITH PAVEMENT
- 2. CURDS SHALL MEET THE SAME COMPRESSIVE STRENGTH AS SPECIFIED FOR THE CONCRETE PAVEMENT.
- J. DETAIL AND ARRANGEMENT OF JOINTS, ALL TYPES, SHALL BE AS SHOWN ON THE STANDARD CONSTRUCTION DETAILS, OR AS
- APPROVED BY ENGINEER. 4. BAR LAPS SHALL BE 30 DIAMETERS.
- DAR CHAIRS OR AN APPROVED SUPPORTING DEVICE SHALL BE



TYPICAL JOINT DETAIL

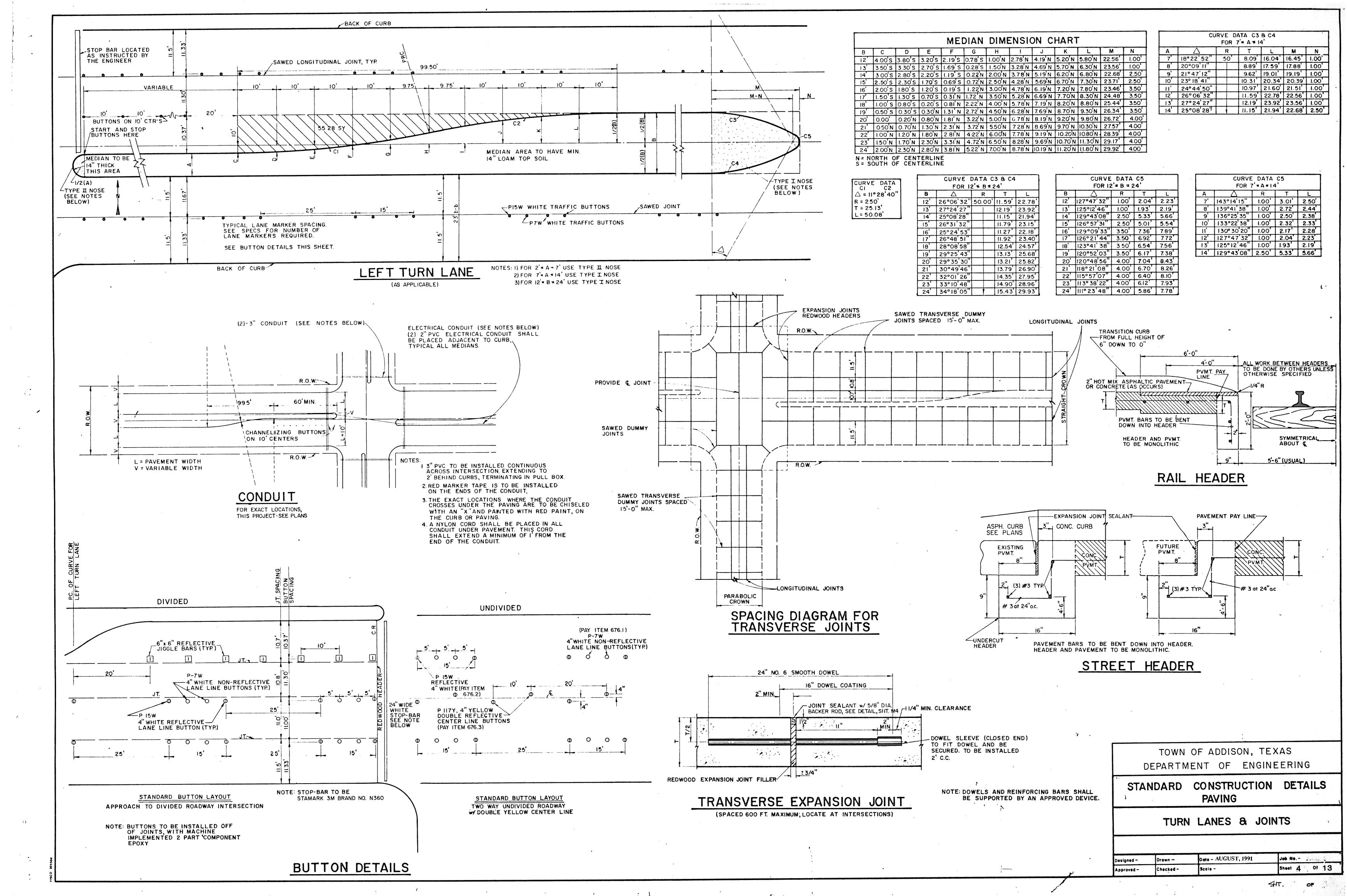
TOWN OF ADDISON, TEXAS DEPARTMENT OF ENGNIEERING

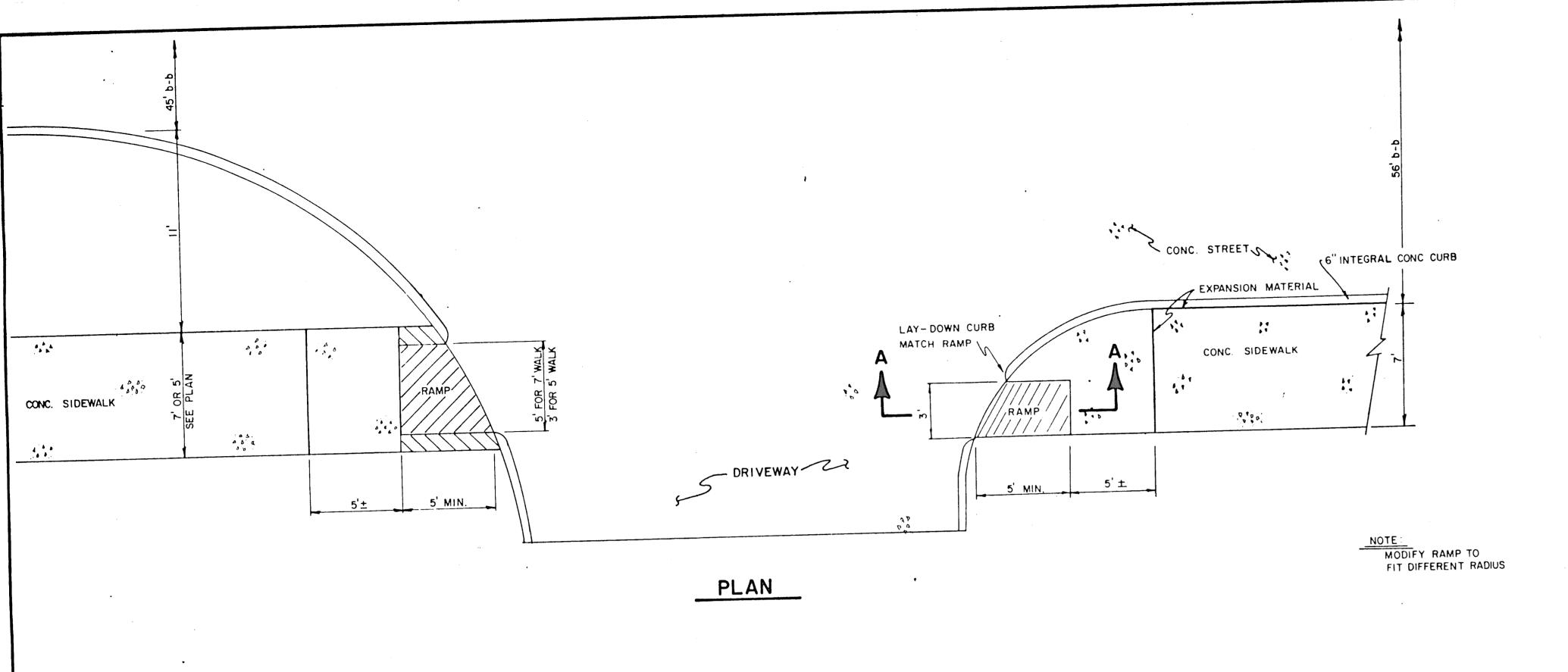
STANDARD CONSTRUCTION DETAILS PAVING

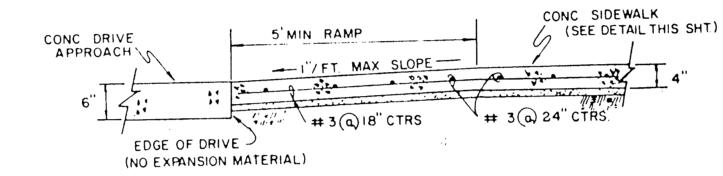
STREET CROWNS & JOINTS

Dote - AUGUST, 1991 Job Me. -Sheet 3 01 13 Approved -Checked -

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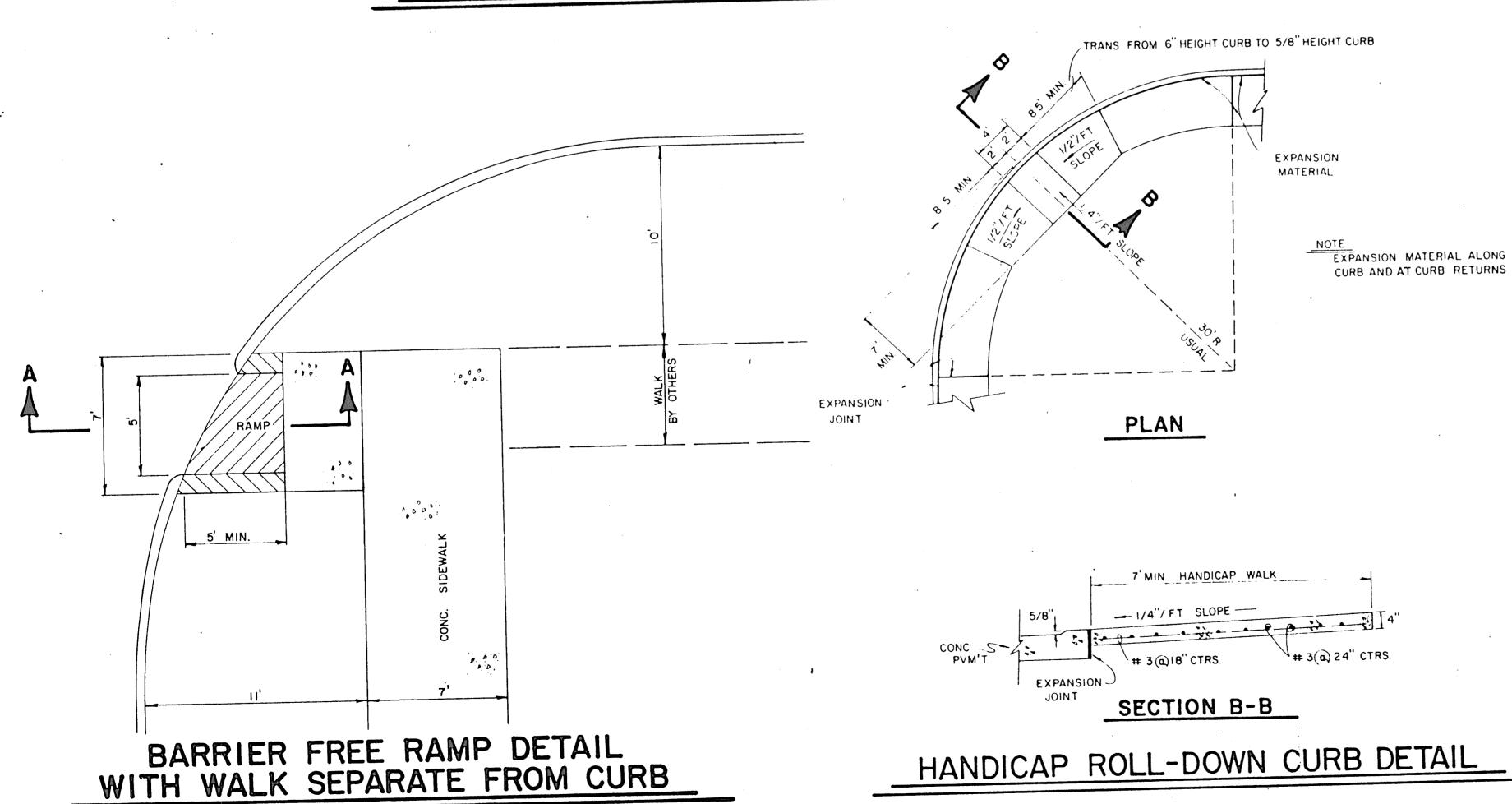


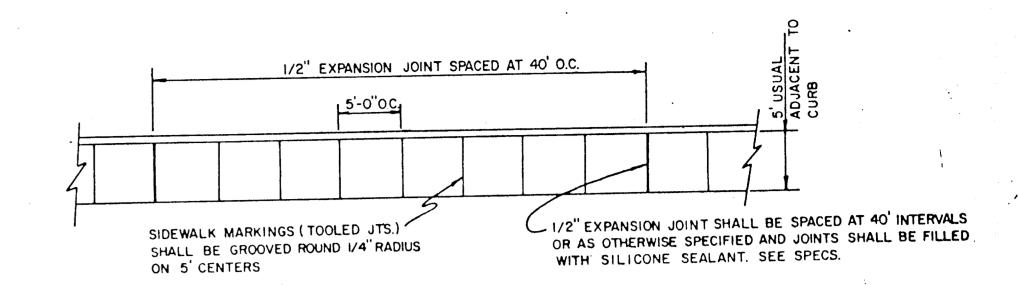




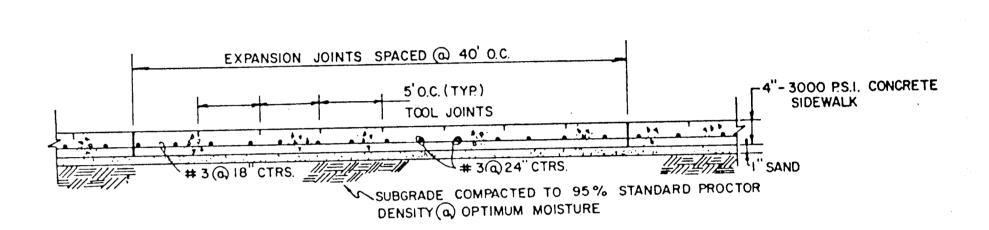
SECTION A-A

BARRIER FREE RAMP DETAIL WITH WALK ADJACENT TO CURB

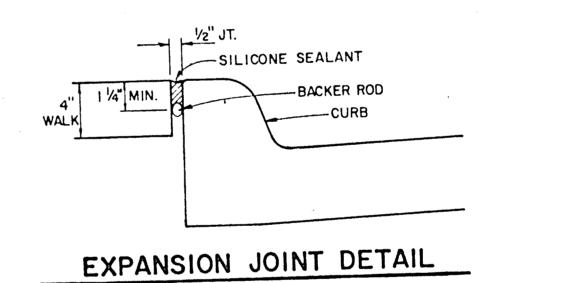


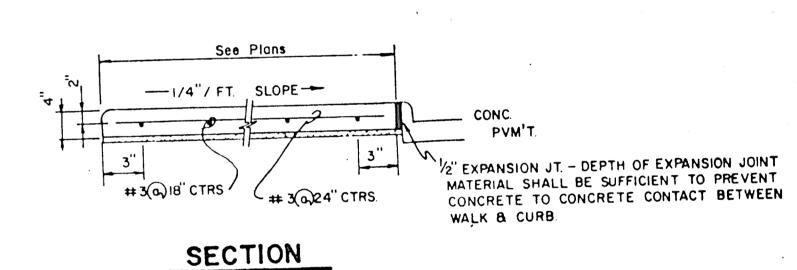


PLAN



SIDE ELEVATION

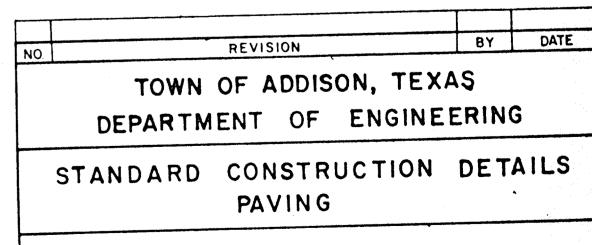




CONCRETE SIDEWALK DETAIL

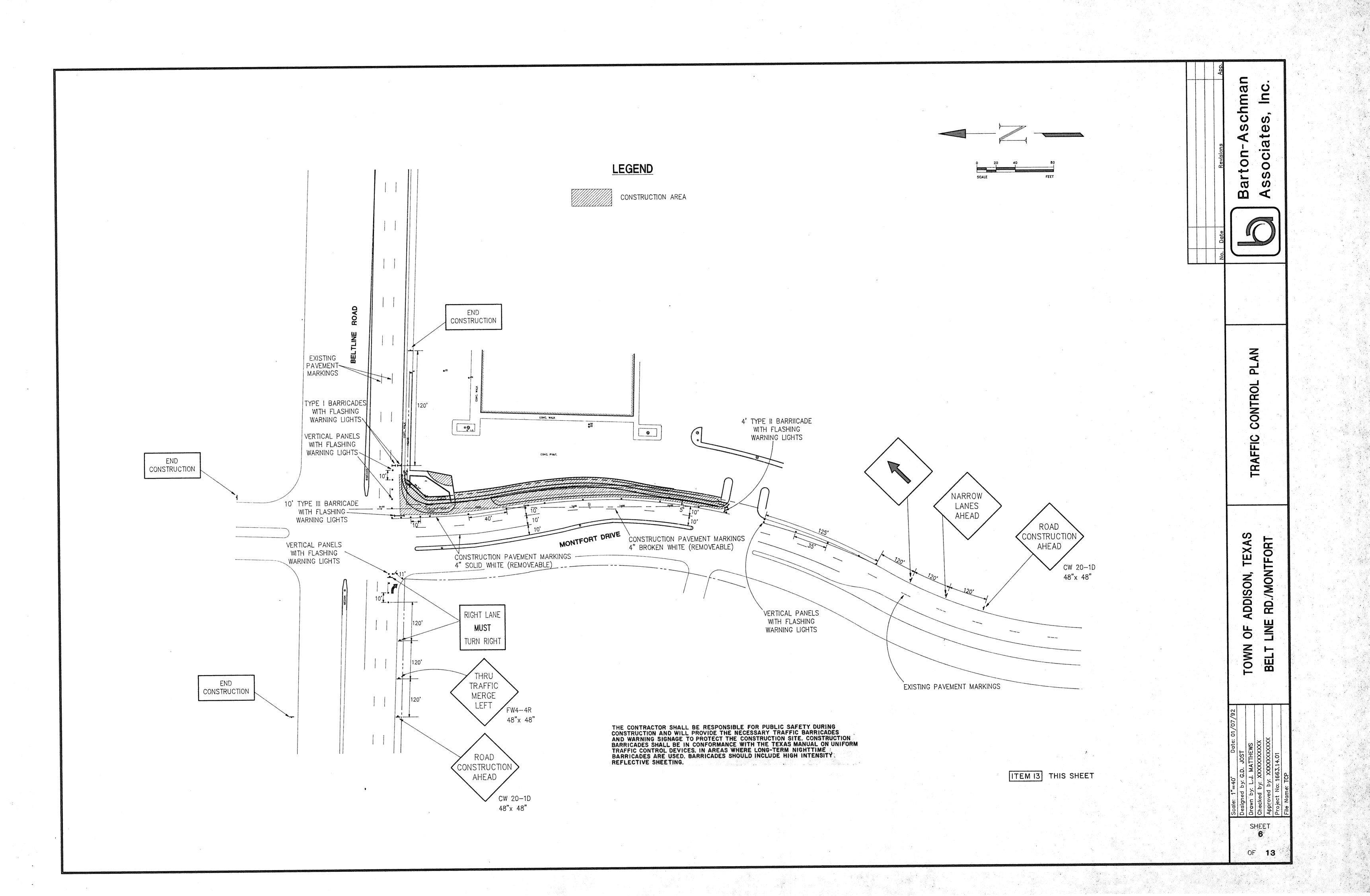
GENERAL NOTES

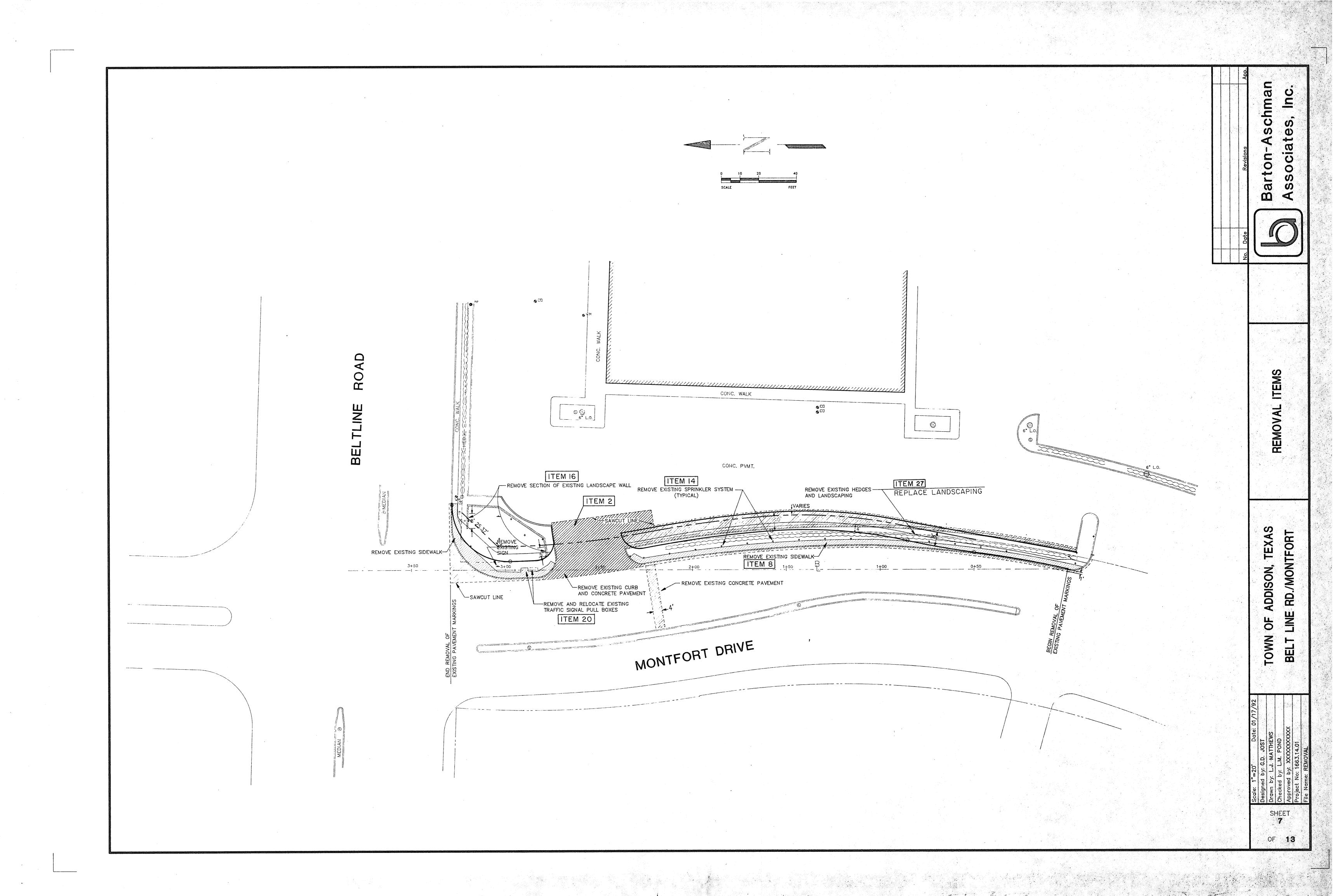
- Reinforced concrete sidewalk shall be 5 or 7 feet wide, a minimum of four (4) inches thick and shall be 3000 psi at 28 days (5 sack mix). Unless noted otherwise.
- Chamfer all exposed edges of concrete (1/4) inch.
- All bar dimensions are given as center to center of bars and are located as shown.
- 4. All reinforcing steel shall be No. 3 on 18 inch centers logitudinally, 24 inch centers transversely and shall conform to the requirements of ASTM A-615, Grade 60.
- 5. 1" thick min. fine, washed sand cushion shall be free from organic materials or clays and shall be used for grade adjustment.
- Subgrade shall be compacted to a density not less than 95% at optimum moisture.
- Tooled joints (contraction joints) shall be on five (5) foot centers and shall be round one-fourth (1/4) inch radius.
- A one-half (1/2) inch expansion joint shall be placed every eight (8) tooled joints, and where works abut old work, or where new work is constructed adjacent to work, or where new work is constructed adjacent to other concrete, a one-half inch expansion joint shall be used where sidewalk is adjacent to curb, the expansion joint shall be made of pre-molded bituminous expansion joint filler or redwood with silicone sealant. See Specs.
- Sidewalks shall be finished by lightly brooming surface transversely to direction of main traffic or where adjacent sidewalks differ from this standard, new sidewalks shall conform to adjacent sidewalk (e.g. exposed aggregate).
- 10. Cross slope walk one-fourth (1/4) inch per foot towards curb or as shown on the drawings to provide drainage.

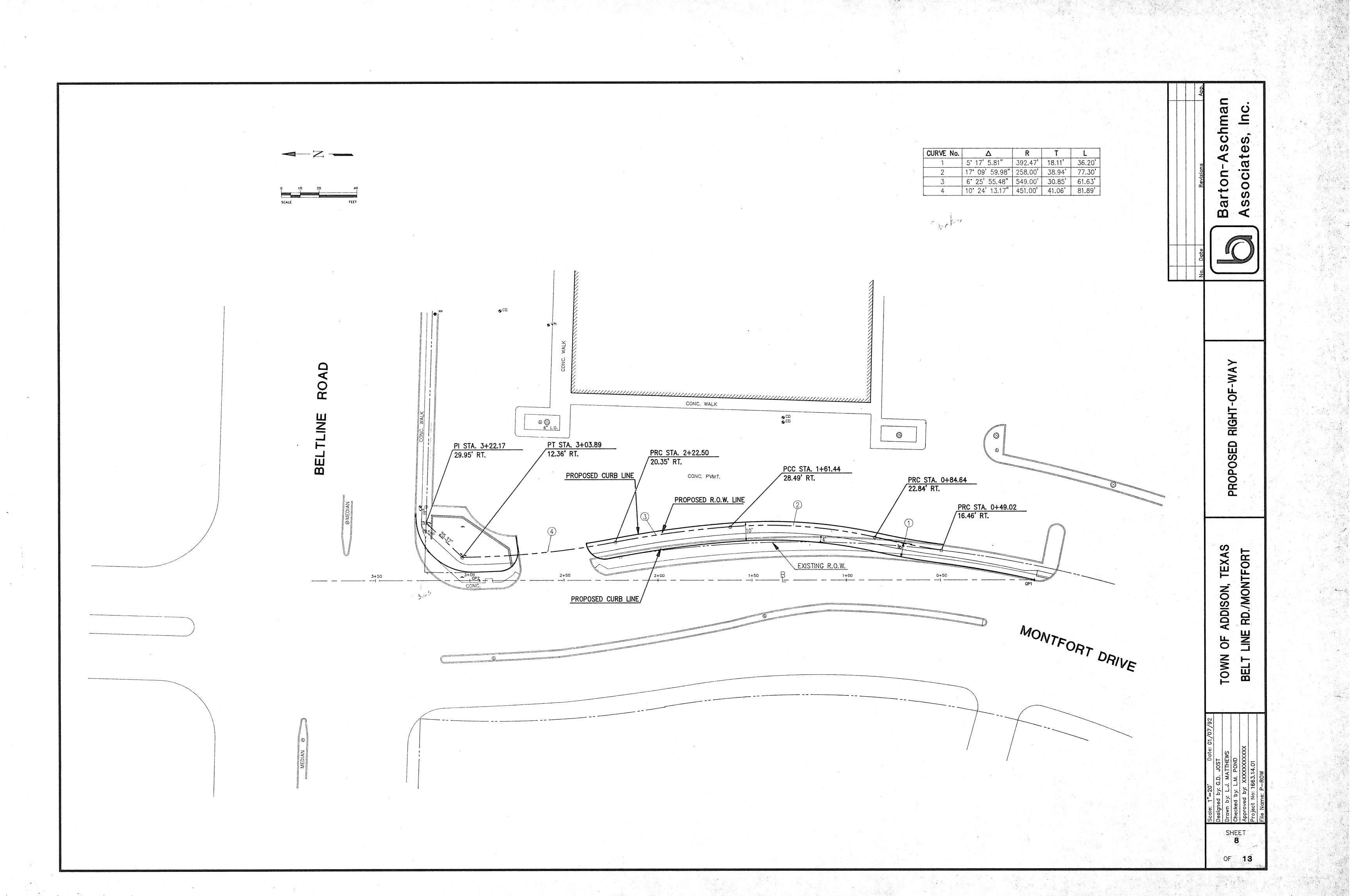


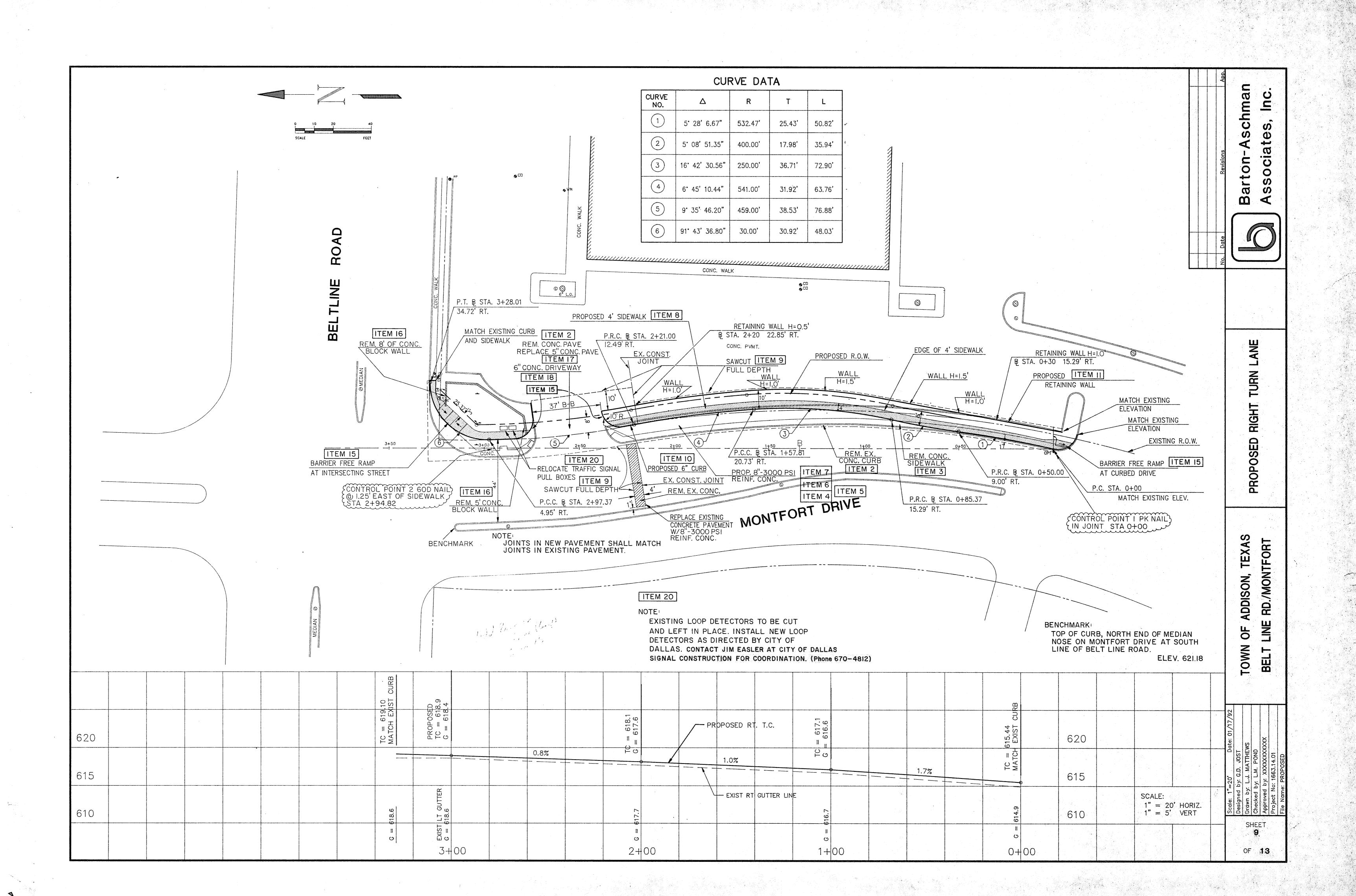
SIDEWALKS & RAMPS

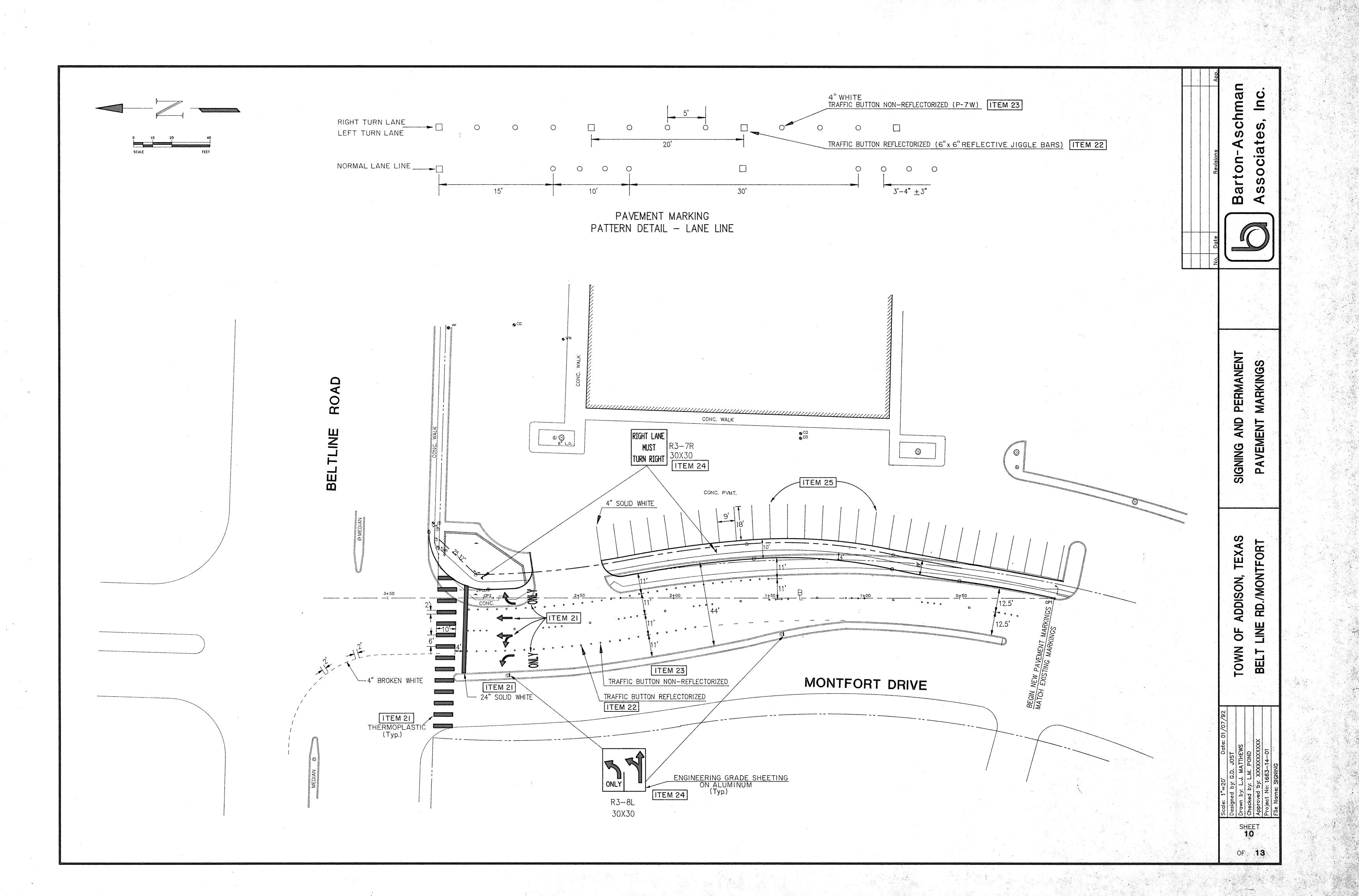
APPROVED -SHEET 5 of 13 DATE AUGUST, 1991

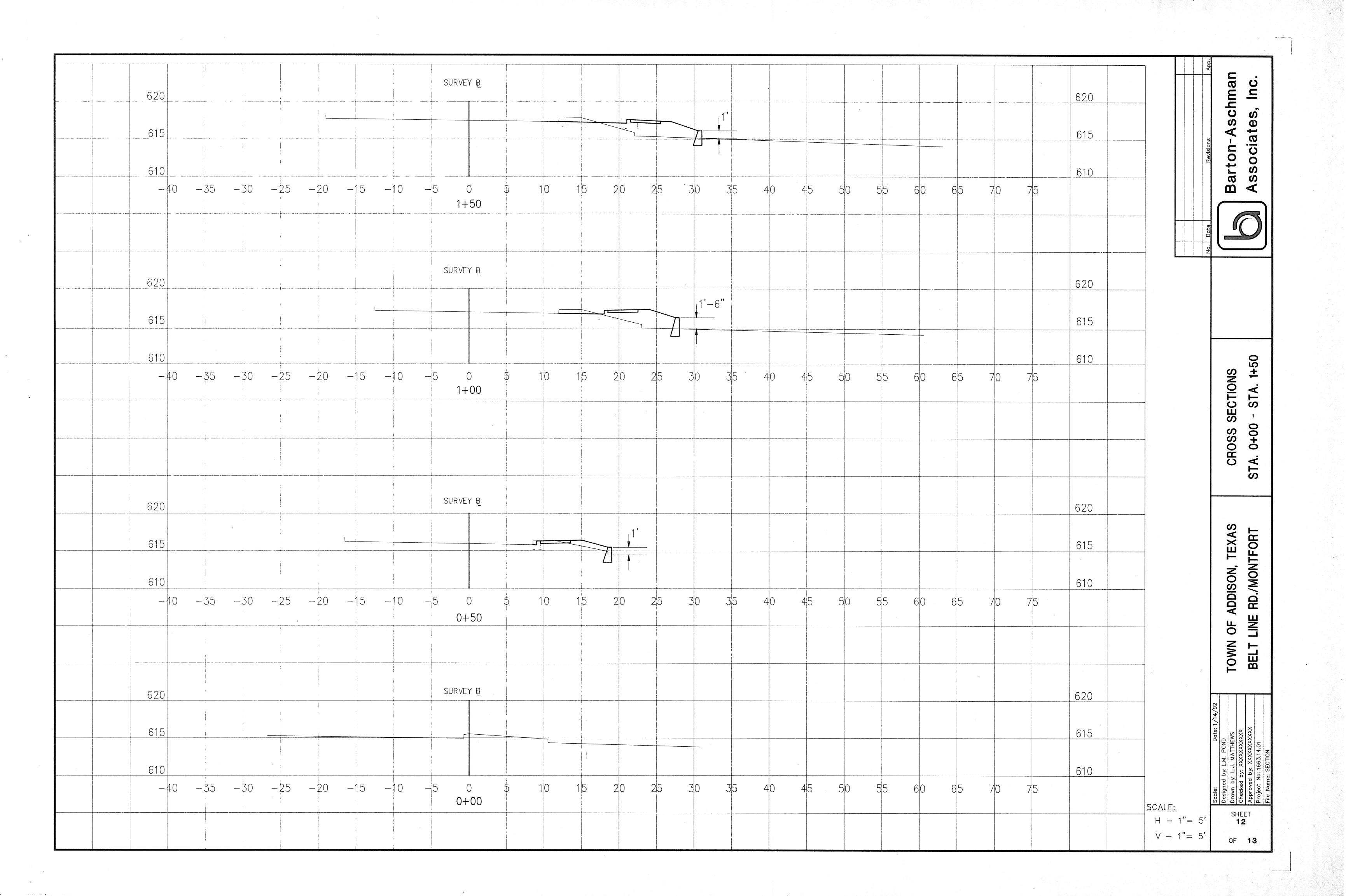


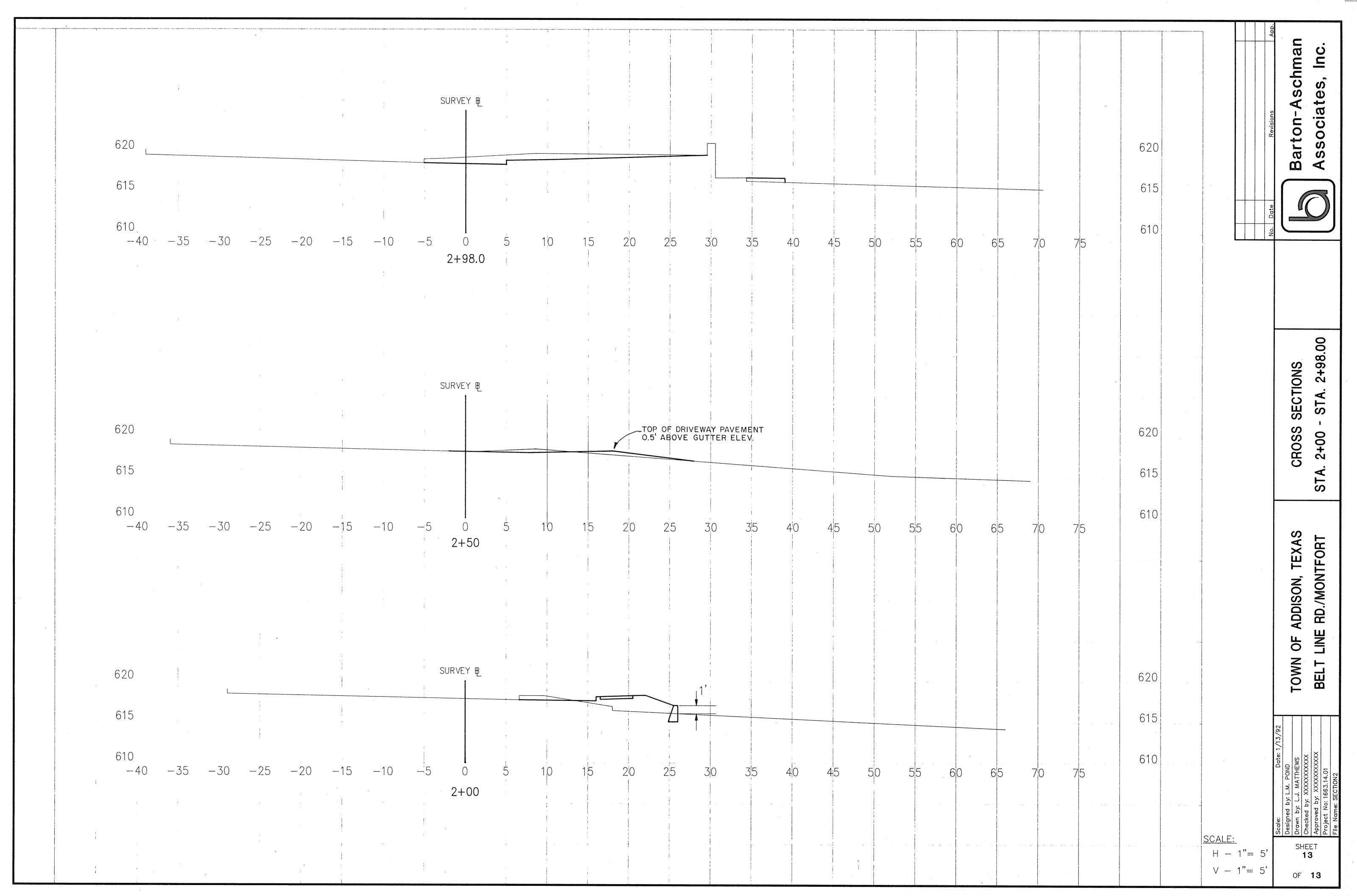


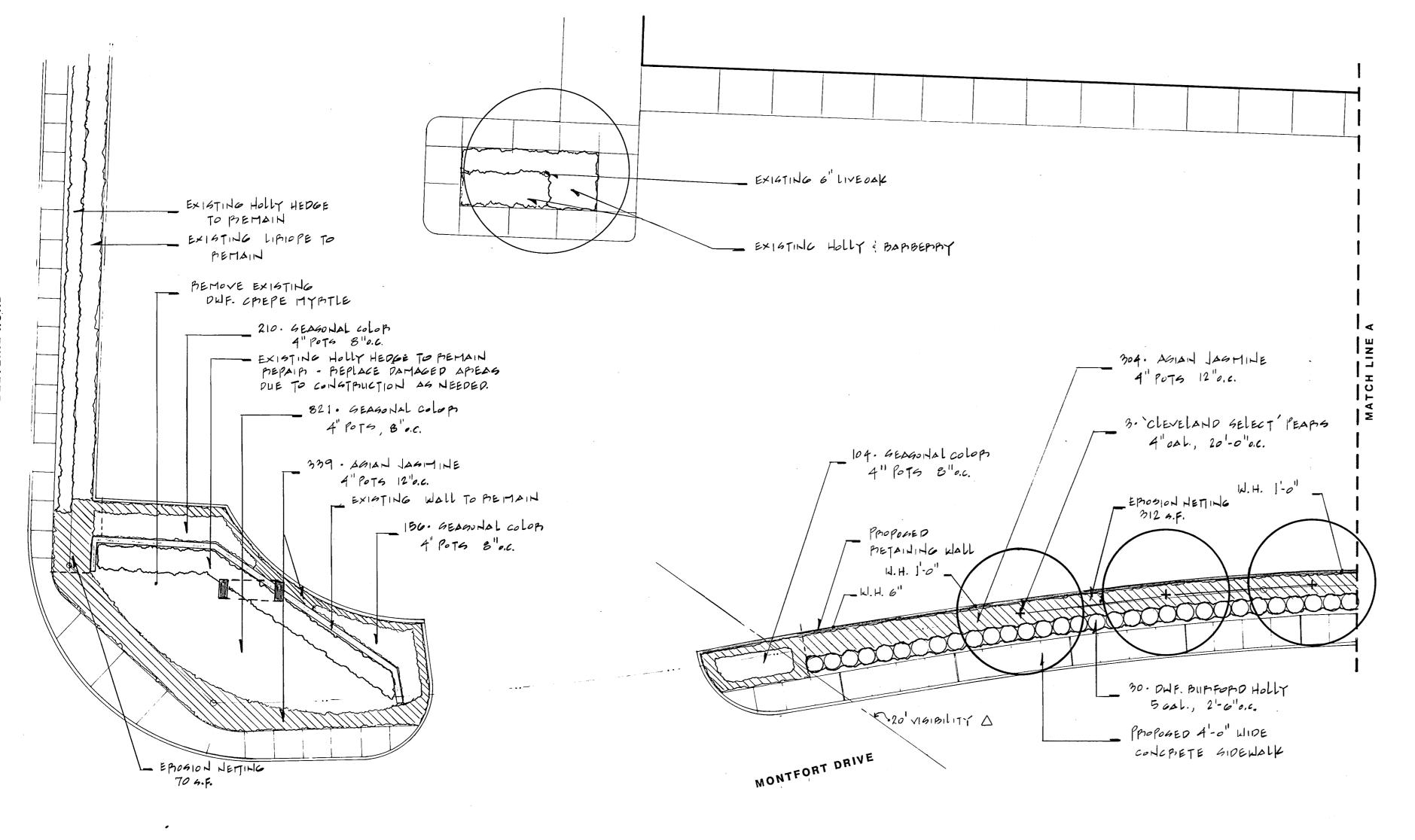


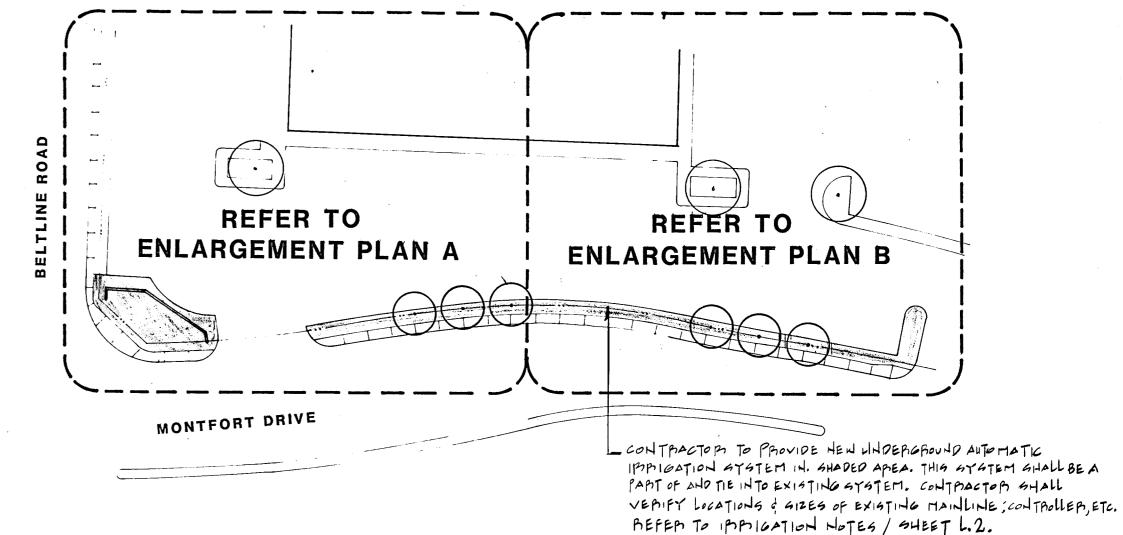












LANDSCAPE PLAN KEY MAP

ENLARGEMENT PLAN A

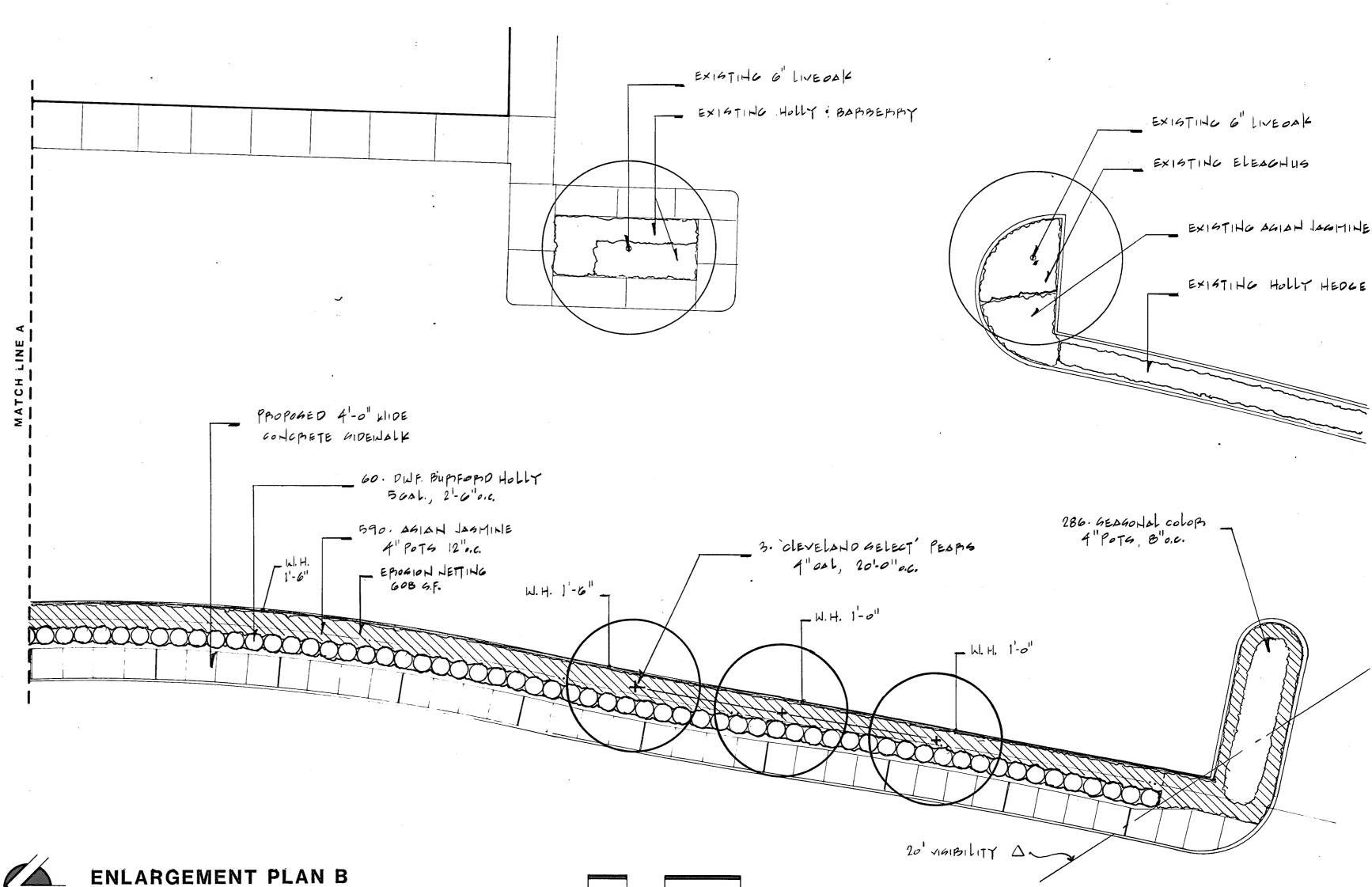
PLANT LIST

BOTANICAL NAME	COMMON NAME	QUANTITY	SIZE	REMARKS
Ilex cornuta 'Burfordii'	Dwarf Burford Holly	90	5 gal.	cont. full 20" spread
Pyrus calleryana 'Cleveland'	Cleveland Select Pear	6	4" cal.	cont. 15' ht. 5' spread matching
Trachelospermum asiaticum	Asian Jasmine	1233	4" pots	cont. 3 runners min.
•	Seasonal Color	1577	4" pots	cont. selection by Owner
			•	•

* NOTE: Plant list is an aid to bidders only. Verify all quantities on plan.

LANDSCAPE NOTES

- · Contractor shall verify locations of all existing and proposed site elements and notify Architect of any discrepancies. Survey data of existing conditions was provided by others.
- Contractor shall locate all existing underground utilities and notify Architect of any conflicts. Contractor shall exercise caution when working in the vicinity of underground utilities.
- Contractor is reponsible for obtaining all required landscape and irrigation permits.
- Contractor to provide a minimum 2% slope away from all structures.
- All planting beds and lawn areas to be separated by steel edging,
- All landscape areas to be 100% irrigated with an underground automatic irrigation system.
- · Landscape contractor shall submit 'as built' drawings at the completion of the project.
- Landscape areas must be permanently maintained in a healthy growing condition at all times.
- Property Owner is responsible for regular weeding, mowing of grass, irrigating, fertilizing, pruning and other permanent maintenance of all plantings as needed.
- All plant material shall be mulched with a two-inch layer of bark mulch. (refer to specifications)
- All trees shall be planted a minimum of 3'-0" away from curbs, walks, walls, structures, etc.



1" - 10-0"

landscape architecture environmental désign

The Brewery 703McKinney Ave Suite 403 Dallas.Texas 75202 (214) 871-0083

STEVEN M. RAHN
1600
GISTERE

IMPROVEMENTS
/ MONTFORT DRIVE AD I WN N LINE SEC Z H Z H Z

1)11 8.13.93 DR WN BY BA (HE(KED) BY 63 REVISIONS_

PROJECT NO.

Sheet lla of 13

PART 1 - GENERAL

- 1.01 REFERENCED DOCUMENTS
- A. Refer to bidding requirements, special provisions general provisions, and schedules for additional requirements.
- 1.02 DESCRIPTION OF WORK A. Work Included: Furnish all supervision, labor materials services, equipment, and appliances required to complethe work covered in conjunction with the landscaping covered in these specifications and landscape plans,
- . Bed Preparation and Fertilization . Notification of sources . Water and maintenance until final acceptance
- 1.03 OUALITY ASSURANCE A. Plant quality is to comply with the standards as outlined
- B. Plant names are to comply with the standards of the American Joint Committee on Norticultural Nomenclature 1942 edition of Standard Plant Names. 1.04 NOTIFICATION OF SOURCES
- acceptance of bid, notify the Landscape Architect of the sources of plant materials and bed preparations
- 1.05 JOB CONDITIONS A. General Contractor to complete following punch list: Prior to Landscape Contractor initiating any portion of landscape installation, General Contractor to leave bed areas one-half (1/2") inch minimum, two (2") inches maximum below finished grade of sidewalks, drives, and curbs as shown on drawings. The remainder of the site (all lawn areas) to be left on (1") inch below finish grade of sidewalks, drives, and curbs. All

- construction debris shall be removed prior to Landscape
- B. Storage of materials and equipment at the job site will be at the risk of the Landscape Contractor. The Owner cannot be held responsible for theft or damage.
- A. Maintenance: 1. The Landscape Contractor will be held responsible The Landscape Contractor will be held responsible for the maintenance of all work from the time of planting until final acceptance by the Landscape Architect. No trees, ground cover, or grass will be accepted unless they show a healthy growth and satisfactory foliage conditions.
- 2. Maintenance shall include watering of trees and plants, cultivation, weeding, spraying, edging, and pruning of trees, mowing of grass, cleaning up, and all other necessary work of maintenance 3. A written notice requesting final inspection and
- acceptance should be submitted to the Owner at least (7) days prior to completion. An on-site inspection by Owner, Landscape Contractor, and Landscape Architect will be completed prior to 4. After final acceptance of installation the Landscape Contractor will not be required to do any of the above listed work.
- 1. Trees shall be guaranteed for a twelve (12) month period after acceptance. Shrubs and ground covers shall be guaranteed for ninety (90) days. The Contractor shall replace all dead materials not partially died so that shape, size, or symmetry has been damaged, shall be considered subject to

a. Plants used for replacement shall be of the

- Page Three
- equipment used in replacements, shall be at no cost to the Owner. Replacement plants shall carry a twelve (12) month guarantee. Any damage, including ruts in the lawn or bed areas, incurred as a result of making replacements shall be
- b. At the direction of the Landscape Architect, plants may be replaced at the start of the next year's planting season but in such cases dead plants shall be removed from the premise c. When plant replacements are made, plants, soil when plant replacements are made, plants, sol mix, fertilizer and mulch, are to be utilized as originally specified and reinspected for full compliance with Contract requirements. All replacements to be included under "Work" of this section.
- effective he will water plants at least twice a week during dry periods and cultivate beds once
- The above guarantee shall not apply where plants die after acceptance because of injury by storms, drowning, hail, freeze, insects, diseases, injury by humans, machines, or theft.
- 4. Acceptance for all landscape work shall be given Architect, provided the job is in a completed, undamaged condition, and there is a stand of grass
- Repairs: Any necessary repairs under the Guarantee must be made within ten (10) days after receiving notice, weather permitting, and in the event the Landscape Contractor does not make repairs accordingly, the Owner, without further notice of Contractor, may provide materials and men to make such repairs at the expense of the Landscape Contractor.

Page Four PART 2 - PRODUCTS

2.01 MATERIALS

- A. Plants: Quantities: The drawings and specifications are complementary; anything called for on one and not the other is as binding as if shown and called for on both. The plant schedule is an aid to bidders only. Confirm all quantities on plan.
- Quality and Size: Plant materials shall conform to the size given on the plan, and shall be sound, healthy, vigorous, with well formed tops and good healthy root systems. The plants shall be free from injurious insects, diseases, injuries to the bark or roots, broken branches, objectionable disfigurements, and are to be of specimen quality.
- 3. Approval: All plant materials shall be subject Approval: All plant materials shall be subject to the approval of the Landscape Architect. All plants which are found unsuitable in growth, or in any unhealthy, badly shaped, or undersized condition, will be rejected by the Landscape Architect, either before or after planting, and shall be removed at the expense of the Landscape Contractor and replaced with acceptable plants as specified.
- height requirements of the plant schedule. Balls shall be firm, neat, slightly tapered, and well burlapped. Any tree loose in the ball or with broken ball at time of planting will be rejected. Balls shall be ten (10°) inches in diameter for each one (1") inch of trunk diameter, measured six (6") inches above ball.
- a. Nomenclature conforms to customary nursery usage; for clarification, the term "multitrunk" defines a plant having three (3) or more trunks of nearly equal diameter.
- 5. Pruning: All pruning of trees and shrubs, as directed by Landscape Architect, shall be executed by Landscape Contractor at no additional cost to the Owner. B. Organic Material: Compost with a mixture of 80% vegetative matter and 20% animal waste. Ingredients should be a mix of coarse and fine-textured material

- Page Five
- C. Mulch for planting bed areas shall be Shredded Hardwood
- D. Organic Fertilizer: Fertilaid, Maestro-Gro, Manalfa, Sustain, Agrispon, bat guano and earthworm castings as recommended for required applications. Fertilizer shall be delivered to the site in the original unopened E. Grass: Bermuda; Blocks of sod should be layed joint
- Grass: Bermuda; Blocks of sod should be layed joint to joint after fertilizing the ground first. The sod should be rolled after planting to level the lawn. The joints between the blocks of sod should be filled with sharp sand where they are evidently gapped open, then watered thoroughly.
- F. Steel Curbing: Shall be Ryerson "Estate Curbing" 1/8" x 4" painted green, with stakes 4' on center PART 3 - EXECUTION
- 3.01 BED PREPARATION & FERTILIZING and report any deficiencies or discrepancies to the Landscape Architect.
- B. All planting areas shall be conditioned as follows: 1. Prepare new planting beds by scraping away existing grass and weeds, adding 4"-6" compost and tilling to a depth of 3" into the native soil. Apply organic fertilizer such as Fertilaid, Maestro-Gro, Manalfa or Sustain 0 20 lbs/1000 sq ft at the rate of 1 lb. of nitrogen per 1000 sq ft.
 - 2. All planting bed areas shall receive a two (2")
- 3. Backfill for tree pits shall be as follows: Use existing topsoil on site, free from debris, placed in nine inch (9") layers and watered in thoroughly.
- C. Grass Area: NOT APPLICABLE All areas to be Solid Sod Bermuda: Blocks of sod should be layed joint to joint after fertilizing the ground first. The joints between the blocks

Page Six of sod should be filled with sharp sand where they

B. Plant materials shall be delivered to the site only

after the beds are prepared and are ready for planting All shipments of nursery materials shall be thoroughly protected from the drying winds during transit. All

shall be kept covered with soil or other acceptable material. All plants remain the property of the Contractor until final acceptance.

Position the trees and shrubs or stake their intended

Excavate pits with vertical sides and horizontal bottom.

Tree pits with vertical sides and notice that the tree pits shall be large enough to permit handling and planting without injury to balls of earth or roots and shall be of such depth that, when planted and settled, the crown of the plant shall bear the same relation to the finish grade that it did to soil surface in place of growth.

D. Notify Landscape Architect for inspection and approval of all positioning of plant materials.

Shrub and tree pits shall be no less than two (2') feet, twenty-four (24") inches wider than lateral dimension of earthball and six (6") inches deeper tha its vertical dimension. Remove and haul from site all rocks or stones over two (2") inches in diameter.

Before setting plants, loosen soil in bottom of pit

Defore setting plants, loosen soil in bottom of pit no less than six (6") inches in depth. Place soil mix and tamp in bottom of pit so that plants will be at a proper height when fully settled. Plants are to be set vertically and soil mix filled into half depth of ball, tamped and thoroughly watered. Remaining burlap around plant balls to be loosened and spread out away from plants or, if too bulky, cut away and removed. Remainder of pit then filled with soil mix, thoroughly tamped and watered all within same day of planting. Watering means thorough saturation of all

lants which cannot be planted at once, after deliver

to site, shall be well protected against the possibility of drying by wind and sun. Balls of earth of BaB plants

3.02 INSTALLATION

- low pressure. On all slopes, soil to be formed into an adequate compacted shoulder on downhill side, with slope on uphill side regraded to form water retaining saucer. Blend saucer into surrounding grade. A. Maintenance of plant materials shall begin immediately after each plant is delivered to site and shall continue until all construction has been satisfactorily
 - II. All plant beds and trees to be mulched with finely ground bark spread to a minimum settled thickness of one (1") inch over entire area of bed or pit, then to be raked to even surface.
 - I. Trees to be pruned after inspection and approval by Landscape Architect with care taken to preserve natural appearance. Broken or badly bruised branches to be removed with a clean cut and treated with tree wound dressing. Pruning to be done by skilled men in accordanc with best horticultural practice, appropriate to type and special requirements of individual tree. All cuts are to be covered by an application of "Tree Scal" are to be covered by an application of "Tree Scal" equal, colored to match trunk. Do not use lead
 - J. All trees to be wrapped with waterproof wrapping material, overlapping one-half the width of the material, wound from ground line to lowest main branches and securely tied at approximately twenty-four (24") inch intervals.
 - Obstruction below ground: In the event rock or underground construction work or obstructions are encountered in any plant pit excavation work to be done under this section, alternate locations may be selected by the Landscape Architect. Where locations cannot be changed, the obstructions shall be removed to a depth of not less than three (3') feet below grade and no less that six (6") inches below bottom of ball when plant is properly set at the required grader. when plant is properly set at the required grade.
 The work of this section shall include the removal
 from the site of such rock or underground obstructions
 encountered at the cost of the Landscape Contractor. L. Pruning and Mulching: Each tree shall be pruned in
 - accordance with standard horticultural practice to preserve the natural character of the plant and in the manner fitting its use in the landscape design 1. Dead wood or suckers and broken or badly bruised

2. Pruning shall be done with clean, sharp tools.

- 3. Cuts over 3/4" in diameter shall be painted with backfill in pits, applied only by open hose at very an approved tree paint. Paint shall cover all exposed cabium as well as other exposed living tissue. Paint shall be waterproof, adhesive, elastic, and antiseptic, free from kerosene, coal tar, creosote, or any other material injurious to the life of the tree.

 - 4. Immediately after planting operations are completed all tree pits shall be covered with a layer of organic material two (2") inches in depth. The limit of the organic material for trees shall be the diameter of the plant pit.
 - 1. Curbing shall be aligned as indicated on the plans. 2. All curbing shall be free of kinks or abrupt bends. 3. Top or curbing shall be 3/4" higher than existing
 - Stakes are to be installed on the planting bed side of the curbing as opposed to the grass side.
 - A. Cleanup: During the work, the premises shall be kept neat and orderly at all times. Storage areas for all materials shall be so organized that they, too, are neat and orderly. All trash and debris shall be removed from the site as work progresses.

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landscape architecture

environmental design

The Brewery 703McKinney

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IRRIGATION SPECIFICATIONS

PART 1 - GENERAL

- A. Provide complete sprinkler installation as detailed and specified herein. Includes furnishing all labor, materials, and equipment for the proper installation. Work includes but not limited to:
- Trenching and backfill
- Automatic controlled system
 Upon completion of installation, supply drawings showing details of construction including location of mainline piping, manual and automatic valves, electrical supply to valves, and specifically exact ocation of automatic valves.
- B. NOTE: All sleeves as shown on plans will be furnished provided by General Contractor 1.02 RELATED WORK SPECIFIED ELSEWHERE
- See Irrigation Plans. See plans for Controller, heads, and 1.03 APPLICABLE STANDARDS
 - A. ASTM
 B. D2241 Poly (Vinyl Chloride) (PVC) Plastic Pipe (SDR-PR) 2287 Flexible PVC
 C. D22464 Poly (Vinyl Chloride) (FVC) Plastic Pipe Fittings Threaded, Schedule 40
 D. D2466 Poly (Vinyl Chloride) (FVC) Plastic Pipe Fittings Socket Type, Schedule 40
 E. D2564 Solvent Cements for Poly (Vinyl Chloride) (FVC) Plastic Pipe Fittings
 F. Standard recommended practice for:
 1. D2855 Making Solvent Cemented Joints with Poly (Vinyl Chloride) (FVC) Pipe and Fittings.

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- - Materials and workmanship shall be fully guaranteed for one year after final acceptance.
 - B. Provide maintenance of system, including raising and lowering of heads to compensate for lawn growth, clea ing and adjustment of heads, raising and lowering of shrub heads to compensate for shrub growth, for one year after completion of installation.
 - C. Guarantee is limited to repair and replacement of defective materials or workmanship, including repair of backfill settlement.
- 1.05 SUBMITTALS
- A. Use of materials differing in quality, size, or Use of materials differing in quality, size, or performance from those specified will only be allowed upon written approval of Owner/Landscape Architect. The decision will be based on comparative ability of material or article to perform fully all purposes of mechanics and general design considered to be possessed by item specified. Bidders desiring to make a substitution for specified sprinklers shall submit manufacturer's catalog sheet showing full specification of each type sprinkler proposed as a substitute, including discharge in GPM maximum allowable spacing and distance of throw (coverage) and minimum allowable operating pressure at sprinkler.
- inkler. al of substitute sprinkler shall not relieve Approval of substitute spiringer small not contractor of his responsibility to demonstrate that final installed sprinkler system will operate according to intent of originally designed and specified system. n. It is the responsibility of the Irrigation Contractor
- to demonstrate that final installed sprinkler system will operate according to intent of originally designed and specified system. If Irrigation Contractor notes and specified system. It frightion contracts notes any problems in head spacing or potential coverage, it is his responsibility to notify the Landscape Architect in writing, before proceeding with work. Irrigation Contractor guarantees 100% coverage of all areas to be

1.07 COORDINATION

- Coordinate installation with other trades, including earthwork paving and plumbing to avoid unnecessary cutting, patching and PART 2 - PRODUCTS 2.01 GENERAL
- A. Sprinkler Mains: Sprinkler mains are that portion of
- B. Lateral Piping: Lateral Piping is that portion of piping from operating valve to sprinkler heads. This portion of piping is not subject to surges, being an "open end" portion of sprinkler system. 2.02 POLYVINYL CHLORIDE PIPE (PVC PIPE)
- A. PVC pipe shall be manufactured in accordance with Commercial standards noted herein. B. Marking and Identification: PVC pipe shall be continu-
- ously and permanently marked with the following information; manufacturer's name, pipe size, type of pipe, and material, SDR number, product standard number, at the NSF (National Sanitation Foundation) seal. C. PVC pipe fittings: shall be of the same material as the PVC pipe specified and shall be compatible with
- Mard, straight lengths of domestic manufacture only. No copper tube of foreign extrusion or any so-called irrigation tubin (thin wall) shall be used.
- 2.04 COPPER TUBE FITTINGS
- Cast brass or wrought copper, sweat-solder type.
- Type UF with 4-64" insulation which is Underwriters Laborator

2.06 FLEXIBLE PVC NIPPLES

2.07 MATERIALS - See Irrigation Plan

- Composed of Standard Schedule 40 PVC Fittings and Flexible PVC Composed of Standard Schedule 40 PVC Fittings and Fiesible PVC meeting noted standards. No clamps or wires may be used. Meet the following pressure test: 200 psi static pressure for two hours and quickburst test exceeding 400 psi. Nipples for both heads and shrub risers to be nominal one half inch diameter by five inches long.
- A. Sprinkler heads in lawn areas as specified on plan. B. PVC Pipe: Class 200, SPR 21 Copper Tubing (Shrub Risers): Type "M" 24V Wire: Size 14, Type U.F.
- C. Electric valves to be all bronze construction or as D. Refer to drawing for backflow prevention require-
- ments and flow valve. Coordinate exact location with Landscape Λ rchitect.

PART 3 - EXECUTION 3.01 INSTALLATION - GENERAL

- Staking: Before installation is started, place a stake where each sprinkler is to be located, in accordance with drawing. Staking shall be approved by Landscape Architect before preceeding. B. Excavations: Excavations are unclassified and include earth, loose rock, rock or any combination thereof, in wet or dry state. Backfill trenches with material of that is suitable for compaction and contains no lumps, clods, rock, debris, etc. Special backfill specifi-cations, if furnished, take procedence over this
- C. Backfill: Flood or hand-tamp to prevent aftersettling. Hand rake trenches and adjoining areas to leave grade in as good or better condition than before installation D. Piping Layout: Piping layout is diagrammatic. Route piping around trees and shrubs in such a manner as to
- newly planted trees or shrubs.

- Sprinkler Mains: Install a four (4") inch minimum trench with a minimum of eighteen (18") inches of
- B. Lateral Piping: Install a four (4") inch wide minimum trench deep enough to allow for installation of sprink-ler heads and valves, but in no case, with less than 12" of cover. C. Trenching: Remove lumber, rubbish, and large rocks from trenches. Provide firm, uniform bearing for entire length of each pipe line to prevent uneven settlement. Wedging or blocking of pipe will not be permitted. Remove foreign matter or dirt from inside of pipe before welding, and keep piping clean by approved means during and after laying of pipe.
- A. Solvent: Use only solvent recommended by manufacturer to make solvent-welded joints. Thoroughly clean pipe and fittings of dirt, dust and moisture before applying
- B. PVC to metal connection: Work metal connections first. Use a non-hardening pipe dope such as Permatex No. 2 on threaded PVC adapters into which pipe may be welded.
- 3.04 COPPER TUBING AND FITTING ASSEMBLY Clean pipe and fittings thoroughly and lightly sand pipe connections to remove residue from pipe. Attach fittings to tubing in an approved manner using 50-50 soft solid core solde
- A. Shrub Spray Heads: Supply in accordance with materials
- Shrub Spray Heads: Supply in accordance with materials list, with nozzling in accordance with drawings. Drawings indicate size of nozzling but do not indicate degree of arc. Determine correct degree of arc of nozzle by area to be covered and by wind conditions that may affect coverage.
- ly high to water over shrubs and plants when they have reached their ultimate growth, or as directed by Landscape Architect.

- A. Supply pep-up spray heads in accordance with materials list and plan. Attach sprinkler to lateral piping with a straight length of PVC pipe plus a semi-flexible polyethylene nipple not less than three (3") inches nor more than five (5") 3.11 FINAL ADJUSTMENT
 - justment of sprinkler system in preparation for Landscape Architect's final inspection. Completely flush system to remove debris from lines and turning on system. Check
- Supply valves in accordance with materials list and sized according to drawings. Install valves in a level position in accordance with Manufacturer's Specifications. See plan for typical installation of electric valve, valve box.

3.06 POP-UP SPRAY HEADS/ROTARY HEADS

3.07 VALVES

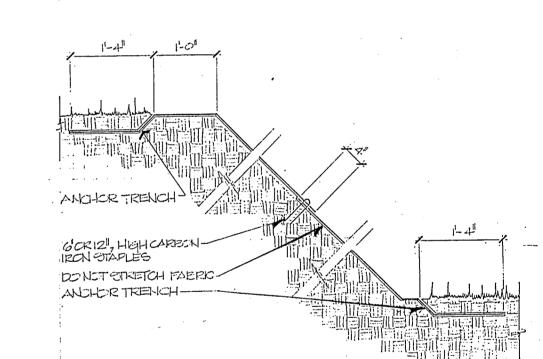
- A. Supply wire from the automatic sprinkler controls to the valves. No conduit will be required for U.F. win unless otherwise noted on the plan. Wire shall be tucked under the piping.
- B. A separate wire is required from the control to each electric valve. A common neutral wire is also required from each control to each of the valves served by each Bundle muiltiple wires and tape them together at 10 ft.
- intervals. Install 10 in. expansion coil at not more than 100 ft. intervals. Make splices waterproof. 3.09 AUTOMATIC SPRINKLER CONTROLS
- Supply in accordance with Irrigation Plan. Install according to 3.10 TESTING

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A. Sprinkler Mains: Test sprinkler main only for a period of twelve to fourteen hours under normal pressure. leaks occur, replace joint or joints and repeat test.

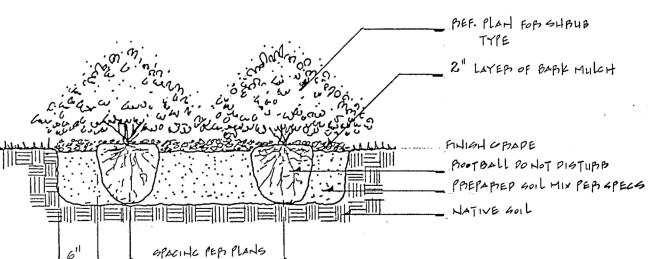
- D. Complete tests prior to backfilling. Sufficient backfill material may be placed in trenches between fittings to insure stability of line under pressure. In each case, leave fittings and couplings open to visual inspection for full period of test.
- After installation has been completed, make final ad-
- sprinklers for proper operation and proper alignmen for direction of flow. Check each section of spray heads for operating pressure and balance to other sections by use of flow adjustment and top of each valve. Check nozzling for proper coverage. Prevailing wind conditions may indicate that arch of angle of spray should be other than as shown on drawings. In this case, change nozzles to provide correct coverage.

02750-7



EROSION NETTING INSTALLATION

FOR AHALLOW GLOPES



IRRIGATION NOTES

TOWN OF ADDISON IRRIGATION SPECIFICATIONS

- All main line pipe to be Schedulo 40 belled PVC. Put not more than two (2) pipes in any one trench. Class 200 lateral piping is subject to prior approval by the Town. Fittings: No crosses are permitted. Separate tees and/or elbows be at least 12". Reduction tees are preferred over use of reducer bushings. Only Spears and/or Lasco are permitted. Allow 18"
- outside of sleeve before first fitting. Wiring: 14 ga. UF. Red - Control wires. White - Ground. Anytime wiring changes direction, such as at an elbow or tee, allow a loop at least one hand width (10 inches) alongside the fitting
- 4. Use King connectors for all wire splices. Allow at least 36" of pigtailed wire at each splice. All splices are to be housed in standard (large) rectangular plastic valve boxes, including valves.
- standard (large) rectangular plastic valvo boxes with 4"-6" of pea gravel placed underneath the valve in such a manner as to prevent soil infiltration into the box. Only Buckner Model 30A single lug 3/4" QCV's are permitted. They are to be connected to a threaded fitting. Teflon paste and appropriate length gray Schedule 80 nipples, and Schedule 40

Only Weathermatic 11000 Series plastic valves are permitted. They are to be located within

- fittings are to be used. House QCV in a 10" round plastic valve box. 7. All heads are to be attached to threaded fittings via 6"polyethylene nipples cut to the appropriate length. All nozzle sizes will be designated on the plans.
- finished grade. Turf 4" (includes tree bubblers within turf areas, use Toro SB-PC nozzles). Very low ground cover (<6" mature height) - 6". Ground cover and low growing shrubs - 12" HP. Funny pipe for 12" HP installations with owner approval is acceptable if conditions warrant. Bubblers: Bed areas only. Use Toro 500 Series stream or flood bubblers.

Rotaries: Only Hunter PGP Series are permitted, unless otherwise noted. Install 3/4"

Pop-ups: Only Toro 570C Series are permitted, unless otherwise noted. Install 3/4" above

above finished grade. Risers: Use Type-M copper with soldered male ends for Toro 570-S shrub adapters and female ends to attach to short polyethylene nipples screwed into threaded fittings. Owner reserves the right to determine placement of risers versus pop-ups. 8. Only Hersey MVR meters with (3) brass flanges are acceptable. Stainless steel bolts and nuts

must be used in the installation along with neoprene gaskets. House in appropriate size, (to be

determined by Owner), concrete box with lid. To bring box to ground level use bricks or pavers, and backfill inside below meter base with at least 6" of pea gravel. Connection to main must be done be the Town's Water Department and all tap materials must be approved by them.

- Refer to the Town of Addison Irrigation Specifications
- for all required sprinkler equipment. 2. Ten days prior to strat of construction, Contractor shall verify static water pressure. If static water pressure is less than 50 PSI, do not start work until notified by
- the Owner to do so. The irrigation contractor shall coordinate installation of the system with the landscape contractor so that all plant material will be watered in accordance with the intent of the
- plans and specifications. 4. The irrigation contractor shall select the proper arc and radius for each nozzle to insure 100% and proper coverage

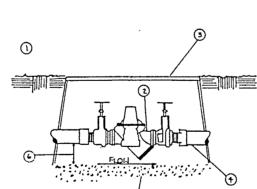
of all plant material.

5. Contractor shall submit Shop Drawings of Irrigation Plan to the Architect for approval prior to installation. 6. Irrigation Details, Notes, and Specifications shall be

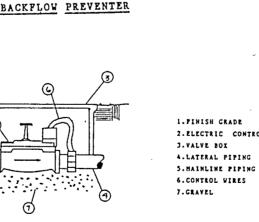
used as a directive for irrigation layout and installation.

IRRIGATION DETAILS

ELECTRIC CONTROL VALVE



1. FINISH CRADE 2. BACKFLOW PREVENTER PER 3. LARGE BOX PER CODE 4. MAINLINE PIPING S.GRAVEL DEPTH PER CODE 6.DISTANCE PER CODE



2. ELECTRIC CONTROL VALVE

1. FINISH CRADE 2. SIDEWALK OR CURB 3.QUICK COUPLER

QUICK COUPLER

12" POP-UP SHRUB HEAD

4.SWING JOINT S. HAINLINE PIPING

2. SIDEWALK OR CURB

4. LATERAL PIPING

S.SWING JOINT

3.12" POPUP SHRUB HEAD

SHRUB PLANTING DETAIL

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DATE 8.13.93 DRAWN BY BA CHECKED BY 63 REVISIONS___

Sheet 116 of 13

PROJECT NO.____

L.2