2000-1 Addison Circle 1998-1999 Huitt-Zollars Correspondence and the second state of th

١

1 1

۰.

· · · · ·

.

<u>,</u> Ran ł

...

~

•··•-

,

•

.

۲

HUITT-ZOLLARS



Dallas • Fort Worth • Houston • El Paso • Phoenix • Tustin • Ontorio • Albuquerque • Seattle • Tacoma

FACSIMILE 1	FRANSMITTAL
Date: 9/17/98	Fax No.: See Babes
H-Z Proj. No. CH 132236	No. of Pages: Z (Including Cover Sheet)
TO: Cormen Morun - 972-45	<u>~7043</u>
John Baumquitmer- 972-4	<u> 50-28</u> 37
Bryant Nail - 972- 770	>-5/29
URGENT X For Your Review Please Ca	all Upon Receipt Orig. To Follow By Mail
Re: Addison Circle	
Costs for Spectrum Dr from North Burdle Urban Center Distric -X BASED ON 121	ive the tron boundary of to Airport Parkway. 29/97 Concept PLAN
ROM: <u>Yawil Meyes</u> SENT BY: If you had any problems receiving the Facsimile Transmittal, pl 3131 McKinney Avenue, • Suite 600 • Dallas, Text	TIME: DATE: lease contact the individual listed above at (214) 871-3311. Thank as 75204-2489 = (214) 871-3311 = FAX (214) 871-07:

PROJECT: ADDISON MIXED LISE DEVELOPMENT (HOPE TRACTS) CLIENT: POST APARTMENT HOMES, L.P.

OPINION OF PROBABLE COST HUITT-ZOLLARS, INC. 1/21/98

1704	(cost	QUORU	MDAIVE	SPECTRU	HORVE	AIRPORT	PARKWAY	то	TAL.
NO.	DESCRIPTION			QUANTITY	COST .	QUANTITY	COST	QUANTITY	COST	QUANTITY	COST
<u> </u>	SCHEDULE I - PAVING IMPROVEMENTS	<u>`</u> _	· · · · ·		\$67,433.40		\$104,099.10		\$13,800.00	······	\$185,132.50
	SCHEDULE 0 - STREETSCAPE IMPROVEMENTS				1165,157.00		\$179,446.00		1224,233.00		1569,834.00
 	SCHEDULE III - UTILITY IMPROVEMENTS				14,400,00		\$113,940.00		\$13,050.00		\$131,390.00
	SUBTOTAL				\$237,990.40		\$397,485.10		\$251,083.00	······	\$866,558.50
	CONTINGENCIES (20%)				\$47,598.08		\$79,497.02	· · · · · · · · · · · · · · · · · · ·	\$50,216.40		\$177,311.70
<u> </u>	DESIGN FEES (20%)				\$\$7,117.70		\$95,396.42		\$60,259.92		\$212,774.04
Ĺ	PROJECT TOTAL				\$342,706.18		\$572,378.54		\$361,559.52		\$1,276,644,24

NOTES:

1. PARALLEL PARKING ALONG BOTH SIDES OF QUORUM FROM FUTURE R-1 TO AIRPORT PARKWAY.

2, NO PARALLEL PASKING ALONG ALEPORT PARKWAY OR SPECTRUM.

3. STREETSCAPE INPROVEMENTS ON BOTH SIDES OF SPECTRUM AND QUORUM, FRONTAGE SIDE ONLY ON AIRPORT PARKWAY.

4. UTILITY IMPROVEMENTS ALONG FRONTAGE ONLY.

5. PECTEUM DRIVE FROM FUTURE &-1 TO ANPORT PARKWAY.

6. COSTS BASED ON ADDISON CIRCLE PHASE & PUBLIC INFRASPLICTURE LOW BID PRICES.

Spectrum Drive Cost Based on 12/29/97 Concept Plan (Full streetscape on the east Side of Spectrum) Town Participation $(\frac{2}{3}) = \frac{4}{3}81,590$ Partnership Participation $(\frac{1}{3}) = \frac{4}{190,790}$

· .

572,380

HANGS AN THE REPORT OF THE REAL PLAN

* = * * *



Fax Transmission

70	Mike Murphy	FAX	NUMBER	(972)450	-2837
COMPANY	Town of Addison	PHONE	NUMBER	(972)450	-2871
FROM	Mike Robbins	DATE	9/9/98	PAGES	3
SUBJECT	Addison Circle Phase I - Public Infrastru	cture			

Mike: Attached is a copy of North Texas Contracting Change Order #1 (Utilities) for the above referenced project. Please review and let me know if this is acceptable. It has been sent to NTC for signatures and I should receive it back in a couple of days to complete processing.

Thank You,

Mike Robbins Project Superintendent-Public Infrastructure

fyon had any problems receiving this Facsimile Transmittal, please contact the individual listed above at (972)866-7790. Thusk You

15720 QUORUM DR., ADDISON, TEXAS 75248

(972) 866-7790 (972) 866-6695 FAX P.02

FACE 1 OF 2

PROJECT: ADDISON CIRCLE PHASE II - PUBLIC INFRASTRUCTURE JOIR RUMBER: SOM / CHANGE ORDER NO. 1 (UTILITES) OWNER: TOWN OF ADDISON CONTRACTOR: NORTH TREAS CONTRACTING, INC. DATE: MUMB

DESCRIPTION OF CHANGES:

THIS CHANGE ORDER DAVOLVES THE FOLLOWING ITEMS.

1) Delete 14" Sheel Sherving Conduct

2) Researing sharps for 14" Seel Sterring Conduit

3) Play &" water / remove pipe (revised location of meter reals to storage bidg.)

4) Added 4" westernater services to serve betwee fewethorses

5) Adjust 2-grave islate (grade)

6) Additional Staking for added contract Rems (waster-storying)

7) Add 4" largetion Slowing **

8) RCCP Additional Costs due to Existing Alignments ***

9) Additional Weiding on RCCP **

10) Addition of 6" Gas & Infigation Stewing-Rev. #2 & #3

11) Robousto Swimigean Pad at Bldg. "P" to Provide Access to Transformers

12) Additional Contract Days dan to Inslamost Weather (32 days)

13) Additional Contract Days due to Added Contract Imps & Additional Work (7 days)

** These costs to be Re-induced by the Totest of Addisco

TTEM			CONTRACT	REVISED	QUANTITY	UNIT	AMOUNT
NO.	DESCRIPTION	UNIT	QUANTITY	QUANTITY	CHANGE	PRICE	OF CHANCE
200 9	CKAOS 'C' (UTILITIES) - K'HEOULE 'U"						
339	Delete 14" Steel Rivering Conduct	LF	400.00	0.00	(400.00)	\$80.00	(\$32,009.09)
344	Restocking Charge for 14" Steel Steering Condum	ى	4,00	1.00	2,616.25	\$2,616.25	\$7,616.25
343	6" SCH. 40 PVC Sleeve	Į\$	0.00	405.00	495.00	\$7.00	\$2,405.00
358	Add 4" (regation Starring **	U7	3054.00	3349.00	<u>255,290</u>	\$4.00	\$1,340.09
345	Adjust 2-Orada Indeta (Orada)	RA	0.00	2,00	2.00	\$1,150.00	\$7,300.00

BED PACKAGE "C" (VTILITIES) - SCHEIXILE "B" SUBTOTAL:

rten		CONTRACT	REVISED	QUANTITY	UNIT	AMOUNT
NO. DESCRIPTION	UNTT	QUANTITY	QUANTITY	CRANGE	PRICE	OF CHANGE
BID PACKAGE "C" (UTILITIES) - SCHEDULE "IV"						
408 Added 4" Westerweise Services To Serve Paters Townbound	EA	0.00	21.00	21.50	4875.00	\$18,375 00
409 Additional Subing due to added contract items (wastewater.sterring etc.)	LS	0.90	1,00	1 130	\$1,149.00	\$1,149.00

BID PACKAGE "C" (UTILITIES) - SCHEDULE "IV" BUBTUTAL

ITEM		CONTRACT	REVISED	QUANTITY	UNIT	AMOUNT
NO. DESCRIPTION	บพาก	QUANTITY	QUANTITY	CHANGE	PRICE	OF CHANGE
BID PACKAGE "C" (UTILITIES) - SCHEDULE "V"						
538 Play & Watan / Recourse Pape	13	0.00	1.00	1.00	3500.00	\$100.00

BED PACKAGE "C" (UTULITIES) - SCHEDULE "V" SUBTOTAL:

rsen NO.	DESCRIPTION	UNIT	QUANTITY	REVISED QUANTITY	QUANTERY	UNIT PRICE	AMOUNT OF CRANGE
BIDPAC	XACE "C" (UTELITUS) - SCHEDULE "VI"						
611	LCC7 Additional Cash **	1.5	0.00	1.043	1 110	\$2,500.00	\$2,500.00
612 /	Additional Welding on RUCP**	HR	0.00	4.00	4.98	\$123.00	\$500.00

BED PACKAGE "C" (UTILITIES) - SCHEDULE "VI" SURTOTAL:						\$3,000.00
пен		CONTRACT	REVISED	QUANTITY	UNIT	AMOUNT
NO. DESCRIPTION	UNIT	QUANTITY	QUANTITY	CHANGE	PRICE	OF CILANUE
BED PACKAGE "C" (UTILITIES) - SCHEDDLE "VE"						
708 Keloesta Switchgeer Pad of Fildy."#"	LS	0.00	1.60	1.06	\$4,190.00	\$4,190.00

BID PACKAGE "C" (UTILITIES) - SCHEDULE "VP SUBTOTAL:

NET CHANGE BY CHANGE ORDER NO.3 **ORIGINAL CONTRACT AMOUNT** PREVIOUS CHANGE ORDERS REVISED CONTRACT AMOUNT

34,296,25 \$1,043,509.50 \$0.00 \$1,087,805.75

\$4,100,00

٢

(322,904.75)

\$19,515.00

\$\$00.00

\$3,009.00

.

PROJECT: ADDISON CIRCLE PHASE II - PUBLIC INTRASTRUCTURE STRUMMER, NOR (CHANCE OF MER NO.) (1711) (TER)		PAGE 2 07 2
OWNER: TOWN OF ADDISON		
CONTRACTOR: NORTH TEXAS CONTRACTING, INC.		
DATE: ONQUE		
EFFECT OF CHANGE ON CONTRACT NIME		
THE WORK REQUIRED UNDER THIS CHANCE ORDER WILL ADD 39 DA	YS TO THIS PROJECT:	
ORIGINAL CONTRACT TIME	300 C.D.	
ADDITIONAL DAYS FOR THIS CHANGE ORDER	39 C.D.	
ADEXTICAAL DAYS FOR PREVIOUS CHANGE ORDER	0	
PRVININ CONTRACT THER	389 U.D.	

THE COMPENSATION AGREED UPON IN THIS CHANGE ORDER ARE FOR ALL COSTS THE COMPENSATION MAY INCUR AS A RESULT OF, OR RELATING TO THIS CHANGE ORDER WHETHER SAID CORTS ARE KNOWN, UNKNOWN, FURESEEN, UNFORESEEN AT THIS THRE, INCLUDING WITHOUT LIMITATION, ANY COST FOR DELAY, EXTENDED OVERREAD, BITTLE OR IMPACT COST, OR ANY OTHER EFFECT ON CHANGED OR UNCHANGED WORK AS A RESULT OF THIS CHANGE ORDER. THESE COMPENSATIONS ARE FOR FULLY COMPLETE AND IN-PLACE CONSTRUCTION. ACTUAL IN PLACE QUANTITIES WILL BE USED FOR FINAL PAYMENT.

Appraved by Tawn of Addison		Approved by Post apartment homes, L.P.	
RON WRITERIEAD, CITT MANAGER	DATE	IDM DUFFY, SENIOR Y.P. (CONSTRUCTION)	DATE
APPROVED BY NORTH TEXAS CONTRACTING, INC.		AFFROVED BY HUITT-ZOLLARS	
dishnis Bailey. Vice Prendent	DATE	DAVID P. MPYERS, P.P.	DATE

TOWN OF ADDISON

CONSTRUCTION SPECIFICATIONS AND CONTRACT DOCUMENTS

ADDISON CIRCLE PHASE I PUBLIC INFRASTRUCTURE





HUITTZOLLARS.

-3131 McKinney Avenue, Suite 600 Dallas, Texas 75204 -(214) 871-3311

March 28, 1996

ISSUED FOR CONSTRUCTION

TOP DRESSING

1

3

- A. After planting has been completed and approved by Architect, top dress bed areas with mulch, 2 inches deep. Delay this operation until near final acceptance.
- CLEAN UP
 - A. Keep premises neat and orderly including organization of storage areas. Remove trash and debris from excavated planting areas, preparing beds, or planting plants from site daily as work progresses. Keep paved areas clean by sweeping or hosing.

END OF SECTION

PRUNING

A. Prune newly planted and transplanted trees as directed by Architect following Fine Pruning, Class I pruning standards provided by National Arborist Association. In general, remove at least onethird of wood by thinning. Do not cut back terminal branches. Remove sucker growth and broken or badly bruised branches.

TREE WRAPPING

A. Wrap nursery grown trees. Extend wrapping from ground to a point immediately below lowest branch of each tree or as directed. Securely fasten in place with tacks or staples, so wrapping will remain in place 2 years.

TREE TRANSPLANTING

- A. Relocate existing trees as noted on the drawings.
- B. Coordinate this effort with site construction to avoid damage.
- C. Complete pruning prior to digging trees according to pruning requirements stated herein.
- D. Dig, ball, and replant trees following procedures required for new trees.

STEEL EDGING

A. Provide steel edging at interface of planted areas and lawn areas unless indicated otherwise on Drawings. Set edging as indicated with top of edging one inch above finish grade on lawn side.

PLANT BED PREPARATION

A. Excavate or fill to provide 6 inches of Bed Mix for shrubs, groundcover and seasonal color. Haul off excavated soil. Add 4 pounds commercial fertilizer per 100 SF of bed area and mix thoroughly. Where bed areas have been left deeper than 6 inches, backfill with sandy loarn to within 6 inches of finish grade followed by 6 inches of Bed Mix as noted above.

SHRUB AND GROUNDCOVER PLANTING

A. Place plants in position on bed areas before cans have been removed. Obtain approval from Architect. Architect reserves right to interchange or shift locations of plants prior to planting. Do not remove burlap from B&B plants. Plant where located, setting plants with tops of balls even with tops of beds, and compact soil carefully around each plant ball. Water each plant thoroughly to eliminate air pockets. Carefully prune plants to remove dead or broken branches and hand-rake bed areas to smooth even surfaces.

SOIL SAVER

A. Install soil saver in areas shown on Drawings and on slopes greater than 3:1 ratio in accordance with manufacturer's direction.

RT 3 - EXECUTION

INSPECTION

Examine subgrade upon which work is to be performed and verify detrimental conditions affecting the work. Notify General Contractor or Architect of unsatisfactory conditions. Do not proceed with work until unsatisfactory conditions have been corrected in manner acceptable to Contractor. Refer to paragraph 1.7 -Job Conditions, herein.

TREE PLANTING

- A. Stake tree locations for approval by Architect.
- B. Tree Pit Excavation: Excavated soil may be used for shade tree backfill if approved for architect. Backfill must be free of subsoils, rock, caliche, and other extraneous material. If backfill is not acceptable, use sandy loam.
- C. Percolation Test: After tree pits are excavated, fill pits with water to determine if pits will adequately drain. If water does not percolate from pits within 24 hours, provide sump pits as detailed on the Drawings.
- D. Shade Trees:
 - 1. Plant in pits twice the diameter of the root balls or to the curb or pavement edge.
 - 2. Backfill with 5 parts excavated soil (or sandy loam) and 1 part peat. Remove excess excavated soil from site. Carefully settle by watering to prevent air pockets.
- E. Ornamental Trees
 - 1. Plant in pits 12 inches greater in diameter than tree ball, backfill with bed mix. Remove excavated soil from site. Carefully settle by watering to prevent air pockets.
 - 2. Determine direction of staking and rotate plants in pit to take advantage of optimum stem orientation.

TREE SAUCERS

A. Form a 4 inch high saucer around each tree planted in the lawn areas for deep watering. Add mulch to the top of the ball as detailed and continue deep watering as required to keep uniform moisture around the root ball until final acceptance.

TREE STAKING

A. Stake trees as detailed on Drawings immediately following planting operation. Take precautions during staking operation to prevent damage or injury to branches. Orient stakes within each cluster or row of trees in same direction.

C. "Ornamental and Shade Trees: (Refer to planting schedule on construction plans) Container grown (not containerized) and Nursery grown (unless otherwise noted), healthy, vigorous, full-branched, well shaped, symmetrical, trunk diameter and height requirements as specified. Balls of container grown and ball and burlap trees shall be firm, neat, and slightly tapered. In addition if the tree is of the ball and burlap variety the ball shall be well burlapped. Trees with loose or broken balls at time of planting shall be rejected. Root balls shall be nine (9) inches in diameter for each inch caliper, measured six (6) inches above root ball for up to and including four (4) inch caliper, and twelve (12) inches above root ball for trees larger than four (4) inch caliper. Trees shall be free of physical damage such as scrapes, bark abrasions, split branches, mistletoe or other parasitic growth.

SOIL PREPARATION MATERIALS

A. Sandy Loam:

2

- 1. Friable, fertile, dark, loamy soil, free of clay lumps, subsoil, stones, and other extraneous material and reasonably free of weeds and foreign grasses. Loam containing Dallasgrass or Nutgrass shall be rejected.
- 2. Physical properties as follows: Clay - between 7-27 percent Silt - between 15-25- percent Sand - less than 52 percent
- 3. Organic matter shall be 3%-10% of total dry weight.
- 4. If requested, provide a certified soil analysis conducted by an approved soil testing laboratory verifying that sandy loam meets the above requirements.
- B. Bed Mix: Premixed Bedding Soil as supplied by Vital Earth Resources, Gladewater, Texas; Professional Bedding Soil as supplied by Living Earth Technology, Dallas, Texas or Acid Gro Municipal Mix as supplied by Soil Building Systems, Dallas, Texas.
- C. Commercial Fertilizer: 10-20-10 or similar analysis. Nitrogen source to be a minimum 50% slow release organic Nitrogen (SCU or UF) with a minimum 8% sulphur and 4% iron, plus micronutrients.

MISCELLANEOUS MATERIALS

- A. Steel Edging: 1/8" x 4" Ryerson steel landscape edging.
- B. Mulch: Partially decomposed dark brown shredded hardwood bark mulch as distributed by Living Earth Technologies, (214)869-4332, Dallas, Texas.
- C. Staking Material for Shade Trees:
 - 1. Post: Studded T-Post, #1 Armco with anchor plate; 6'-0" length; paint black.
 - 2. Wire: 14 gauge, single strand, galvanized wire.
 - 3. Rubber hose: 2 ply, fiber reinforced hose, minimum 1/2 inch inside dia. Color: Black.
- D. Gravel: Washed native pea gravel, graded 1 in. to 1-1/2 in.
- E. Filter Fabric: Mirafi 140N by Celanese Fibers Marketing Company, available at Lofland Co., (214)631-5250 or approved equal.
- F. Wrapping Material: Waterproofing crepe tree wrapping paper.

Dannon Mormation Dannon Mormation Dor Phase Jon DSEAP Wannen Xe. glade Strictland ···· ···· ····

). Condition of Surfaces:

Landscape areas will be left as described in Section 02200, Earthwork. Complete bed preparation as noted herein.

VARRANTY

- Warranty plants for one year after final acceptance. Replace dead materials and material not in vigorous, thriving condition as soon as weather permits and on notification by Owner. Replace plants, including trees, which in opinion of Architect have partially died thereby damaging shape, size, or symmetry.
- 3. Replace plants with same kind and size as originally planted, at no cost to Owner. Provide oneyear warranty on replacement plants. Trees may be replaced at start of next planting or digging season. In such case, remove dead trees immediately. Protect irrigation system and other piping, conduit or other work during replacement. Repair any damage immediately to the Owner's satisfaction.
- 2. Warranty excludes replacement of plants after final acceptance because of injury by storm, drought, drowning, hail, freeze, insects or diseases.
-). At end of warranty period, remove staking and guying materials.

MAINTENANCE

- Water: Will be available on site. Provide necessary hoses and other watering equipment required to complete work.
- B. Maintain plantings and trees by watering, cultivation, weeding, spraying, cleaning and replacement as necessary to keep landscape in a vigorous, healthy condition and rake bed areas as required until final acceptance.
- C. Coordinate watering schedules with irrigation contractor during installation and until final acceptance. Provide deep root watering to newly installed trees.
- D. Monitor sump pits at trees daily and dewater pits if standing water persists.

- PRODUCTS

PLANTS

- A. General: Well-formed No. 1 grade or better nursery grown stock. Listed plant heights are from tops of root balls to nominal tops of plants. Plant spread refers to nominal outer width of the plant, not to the outer leaf tips. Plants will be individually approved by the Architect and his decision as to their acceptability shall be final.
- B. Shrubs and Groundcovers: Nursery grown, healthy, vigorous, of normal habit of growth for species, free from disease, insect eggs and larvae. Specified sizes are before pruning and measured with branches in normal position. Plants shall be well rooted and established in the container.

PRODUCT DELIVERY, STORAGE AND HANDLING

Preparation:

- 1. Balled and Burlapped (B&B) Plants: Dig and prepare shipment in a manner that will not damage roots, branches, shape, and future development.
- 2. Container Grown Plants: Deliver plants in container sufficiently rigid to hold ball shape and protect root mass.

Delivery:

B

- 1. Deliver packaged materials in sealed containers showing weight, analysis and name of manufacturer. Protect materials from deterioration during delivery and while stored at site.
- 2. Deliver only plant materials that can be planted in one day unless adequate storage and watering facilities are available on job site.
- 3. Protect root balls by heeling in with saw dust or other approved moisture retaining material if not planted within 24 hours of delivery.
- 4. Protect plants during delivery to prevent damage to root balls or desiccation of leaves. Keep plants moist at all times. Cover all materials during transport.
- 5. Notify Architect of delivery schedule 48 hours in advance so plant material may be observed upon arrival at job site.
- 6. Remove rejected plant material immediately from site.
- 7. To avoid damage or stress, do not lift, move, adjust to plumb, or otherwise manipulate plants by trunk or stems.

JOB CONDITIONS

A. Planting Restrictions:

Perform actual planting only when weather and soil conditions are suitable in accordance with locally accepted practices.

B. Protection:

- 1. Do not move equipment over existing or newly placed structures without approval of Architect and General Contractor.
- 2. Provide board-roading as required to protect paving.
- 3. Protect other improvements from damage, with protection boards, ramps and protective sheeting.

Utilities:

C.

- 1. Determine locations of underground utilities and perform work in a manner which will avoid possible damage. Hand excavate, if required, to minimize possibility of damage to underground utilities.
- 2. Coordinate work with irrigation contractor to prevent damage to underground sprinkler system.

ECTION 02900 - LANDSCAPING

ART 1 - GENERAL

- 1 DESCRIPTION
 - A. Provide complete landscaping shown on drawings and described herein.

.2 RELATED SECTIONS

- A. Irrigation System
- B. Lawns and Grasses
- C. Earthwork

.3 QUALITY ASSURANCE

- A. Comply with applicable federal, state and county regulations governing landscape materials and work.
- B. Architect reserves right to review materials at growing site.
- C. Observation at growing site does not preclude right of rejection at job site. Plants damaged in transit or at job site shall be rejected.
- D. Personnel: Employ only qualified personnel familiar with required work.

REFERENCED STANDARDS

- A. American Standard for Nursery Stock, Edition approved October 27, 1980 by American National Standards Institute, Inc. (Z60.1) plant materials.
- B. Hortus Third, 1976 Cornell University plant nomenclature.

.5 SUBMITTALS

- A. Samples: Provide representative quantities of sandy loam soil, mulch, bed mix material, gravel, and crushed stone. Samples shall be approved by Architect before use on project.
- B. Product Data: Submit complete product data and specifications on all other specified materials.
- C. Submit three representative samples of each variety of omamental trees, shrubs, and groundcover plants for Architect's approval. When approved, tag, install and maintain as representative samples for final installed plant materials.
- D. File Certificates of Inspection of plant material by state, county, and federal authorities with Architect, if required.
- E. Soil Analysis: Provide sandy loam soil analysis if requested by the Architect.

Addison Circle Public Infrastructure January 1996

Addendum No. 2 1/22/96

HUITT-ZOLIARS

Dallas + Fort Worth + Houston + El Paso + Phoenix + Tustin + Ontario + Albuquerque

FACSI	MILE TRANSMITTAL
Date: 4/2/98	Fax No.: See Below
H-Z Proj. No	No. of Pages: 3 (Including Cover Sheet)
TO: Mark ferm - 972-54	57-1552 Mike Robbins 972-866-6695
Bryant Nail 972-7	770-5129
URGENT For Your Review	Please Call Upon Receipt Orig. To Follow By Mail
Re: Addison Circle F	Phwe I
Revued Sheets	1+4 from 60 # 10
Item 168 St	neet Autolong
3/19/98 Cost-plus	brankelann 4,378.91
	\$ 6,132.03
FROM: Dawiz Merja SENT BY: Carla Cours	5
If you had any problems recuiring the Facturale Tran 3131 McKimmey Avenue, + Suite 600 + De	umittal, please contact the individual littled above at (214) 871-3311. Thank you. sllar, Texar, 75204-2489 + (214) 871-3311 + FAX (214) 871-0757

.4

*: :

PROJECT: ADDISON CIRCLE PHASE I PUBLIC INFRASTRUCTURE SID NUMBER: 55-25 / CHANGE ORDER NO. 10 OWNER: TOWN OF ADDISON CONTRACTOR: GISSON AND ASSOCIATES

CATE: 3/30/96

TEL		<u> </u>		DENAGED	AUANTITY	10.07	
NG NG		1047	OUANTITY	CHANTITY	CHENCE		
8/3.8			GOMAIN		STRATE	FRIME	OF CHANGE
401	A SOR 28 DAT WASTEWATER INFINITION LITING PURFOMENT	IF		20	.20	\$21.80	(1437 m
407	N SDR 75 PVC WARTEWATER I INF MILLIONA FURIEDMENT		1830	1730	-4.0	\$10.44	1 700 GA
405	ST STOR 35 FWC WASTEWATER ATERAL W/2 WAY (1 FANN) IT	FA	17	1.55	.1	\$540.00	41,7V8,V4
408	TVINSPECTION	LUE .	3600	3051		51.67	\$87.87
409	TRENCH SAFETY FOR CONSTRUCTION	LF	4010	3671	-339	\$0.65	\$220.35
	SCHEDULE IV SUBTOTAL						\$969.31
3CH	DULE V - WATER IMPROVEMENTS						
503	5" DIA PVC AWWA COOD, DR 18, CL 150 WATER PIPE INCL EMBE	ᇉ	225	172	-53	\$14,58	(5772.74
504	5" DIA PVG AWWA GIOD, DR 18, CL 150 WATER PIPE INCL EMBE	U.	1945	1944	-1	\$18.20	(\$18.20
506	T DIA. RESILIENT SEAT GATE VALVE	EA	12	13	1	\$486.00	\$484.00
521	TRENCH SAPETY FOR CONSTRUCTION	L.F	2484	2177	-317	\$0.22	(\$69.74
524	2" WATER SERVICE LINE	EA	16	19	1	\$540.00	\$540.00
- 	SCHEDULE V SUBTOTAL						\$157.32
SCHE	DULE VI - ELECTRICAL IMPROVEMENTS	[
701	BEB CONC. ENCASED DUCTBANK, & DIA, TYPE DB PVC CONDUI	LF	2800	2683	-117	\$70,00	(\$5,190.00
702	HER CONC. ENCASED DUCTBANK, & DIA. TYPE DB PVC CONDUI	LF	353	361	28	\$50.00	\$1,408.00
708	TUE STANDARD FRECAST DEEP WELL 25 KV SWITCH PAD	EA	3	2	-1	\$1,200,00	(\$1,200.00
707	6" DIA, TYPE DB PVC 90 DEGREE SWEEP 36"	EA	. 13	12	-1	\$55.00	(155.00
706	1065 CONC. ENCASED DUGTBANK, & DIA. TYPE DB PVC CONDU	ᄕ	136	122	-13	\$160.00	(\$1,950.00
	SCHEDULE VII SUBTOTAL						39.995.97
SCHE	DULE IX - ALTERNATE STREETSCAPE MPROVEMENTS		*				
913	4" THICK CEMENT STABILIZED SUBGRADE	5¥	873	647.22	-25.78	\$5.40	(\$139.21
814	1/8" X 4" RYERSON STEEL LANDSCAPE EDOING	UF	870	0	-670	\$1.45	(\$878.20
	SCHEDULE IX SUBTOTAL						(\$1,117.41
NET C	HANGE BY CHANGE ORDER NO. 10					654	
ORICI	NAL CONTRACT AMOUNT						\$3,517,954.44
PREV	GUS CHANGE ORDERS					-	(\$405,434,33
REVIS	ED CONTRACT AMOUNT					-	
FFFF	TOF CHANGE ON CONTRACT THE					1	3,112,78
riuuri The≦⊻	VORK REQUIRED UNDER THIS CHANGE ORDER WILL ADD 0 DAYS	TOTH	S PROJECT:				* *
	NAL CONTRACT TIME		550				
ADDIT	KONAL DAYS FOR THIS CHANGE ORDER		0				

 CRIGINAL CONTRACT TIME
 550

 ADDITIONAL DAYS FOR THIS CHANGE ORDER
 0

 ADDITIONAL DAYS FOR PREVIOUS CHANGE ORDER
 0

 REVISED CONTRACT TIME
 550

DRAFT.

PAGE 3 OF 4

DESCRIPTION OF CHANGES:

THIS CHANGE ORDER INVOLVES THE FOLLOWING ITEMS:

1) ADJUSTMENT FOR FINAL INSTALLED QUANTITIES; REPLACEMENT OF DAMAGED SHRUBS; PATCHING OF STREETS; REPAIR OF CEMENT

TREATED BASE ON NORTH SIDE OF GOODMAN AVE: DRINKING FOUNTAIN PIERS; RELOCATION OF THREE YIELD SKINS AT ROUNDABOUT.

ITEM			CONTRACT	REVISED	QUANTITY	UNET	AMOUNT	
NO.	DESCRIPTION	UNIT	QUANTITY	QUANTITY	CHANGE	PRICE	OF CHANGE	
SCH.	CULE 1- PAVING IMPROVEMENTS	1						
103	REMOVE & DISPOSE OF EXIST. CONC. PART,	5Y	5604	5694	90	\$9.40	\$546.00	1
107	8" 550 P31 FLEX REINF. CONC. PVMTT.	SY .	5712	5835	-77	\$31.00	(\$2,387.00)	
108	8" 650 PSI REINF, CONC. DROP SLAB (STREET)	5Y	1446	13,962	-54	\$35.90	(\$1,938.60)	
109	4" 3000 P5I REINF, CONG, SIDEWALK	67	7231	0022	1391	\$2.80	\$3,894.80	
110	4" 3000 PSI REINF. CONC. SUBBASE (SIDEWALK)	SF	56766	57228	462	\$2.90	\$1,339.80	
111	T 3000 PSI REINF. CONC. SUBBASE (SIDEWALK)	SF	1225	2874	(649	\$3.20	\$5,278.90	
113	5" 650 PSI FLEX REINF, CONC. DRIVE	SY	218	269	51	\$30,00	\$1.530.00	
114	5" 150 PSI REINF. CONC. INTEGRAL CURB	LF	\$162	5292	130	\$1.50	\$105.00	
115	REINF. CONC. STREET HEADER	내	300	411	111	\$5.00	\$555.00	
112	FULL DEPTH SAWCUT EXIST. CONCRETE	UF	1299	1637	255	\$2.75	\$737.00	
119	4" THERMOPLASTIC LANE STRIPE	UF	54	46	-6	\$2.18	(\$12.90)	
120	4" NON-REFL BUTTON, TYPE W	EA	112	210	95	\$4.32	\$423.36	
121	A REFL, BUTTON TYPE I-W-C	EA	195	130	-65	\$8.48	(\$421.20)	
125	STREET SIGN POST, FOUNDATION, MOUNTING HARDWARE	EA	52	55	4	\$166.32	\$665.28	
127	STREET BARRICADE	UF	76	82.5	-12.5	\$25.38	(\$317.25)	
139	REMOVE EXIST. STREET LIGHT FOUNDATION	EA	5	7	2	\$425.50	\$853.20	
140	INSTALL STREET LIGHT FOUNDATION (QUORUM DR)	EA	11	13	2	\$459.00	\$916.00	
141	o" X o" CLASS 'A' TYPE HC JIGGLE BAR TILE	EA	54	59	5	\$13.50	\$67.60	I
142	LONGITUDINAL BUTT JOINT	UF	802	. 881	79	\$7.50	\$592.50	
145	6" THICK 650 PSI FLEX REINF, CONC. PAVEMENT	SY	4697	5165	255	\$34.00	\$9,112.00	
145	5" THICK 650 PSI FLEX REINF, CONC. DROP SLAB	57	1211	1009	-211	\$33.70	(\$7,110.70)	
148	REMOVE AND REPLACE CONC. UNIT PAVERS	SF	2670	2852	282	\$2.50	\$705.00	
149	6" COMPACTED FLEX BASE	SY	297	328	31	\$8.30	\$195.30	
151	REPLACE EXIST. BLACK VINYL COATED CHAIN LINK FENCE	EA	240	220	20	\$19,98	(\$329.60)	
154	CONSTRUCTION PROGRESS SCHEDULES AND REPORTS	LS	1	0	-1	\$2,100.00	(\$2.100.00)	
155	FUR. VEH. BRICK PAVER DELIVERED TO SITE, TYPE "C"	SF	11773	11000	-773	\$2.69	(\$2,233.97)	
156	10" HIGH & 12" WIDE 650 PSI FLEX REINF. CONC. CURS	EA	421	394	-27	\$10.00	(\$270.00)	
157	SKINAL INTERCONNECT WIRING	LF	1200	0	-1200	\$3.74	(\$4,453.00)	
158	FURL VEH. BRICK PAVER DELIVERED TO SITE, TYPE "A" & "B"	SF	8658	8215	1258	\$3.1Z	34,236,96	
167	REMOVE & REPLACE CEMENT TREATED BASE	SF	0	548	846	\$1.05	\$1,399.20	A Second
168	STREET PATCHING	LS	0	1	1	\$4,376,01	44,070.07	6132.00
锢	RELOCATE YIELD SIGNS AT ROUNDABOUT	EA	. 0	3	3	\$385.00	\$1,156.00	-
	COMERCIE EL CINITZITAL -							,
	SUREDULE I SUBTIVIAL			-				
							19.150	40
								-

DRAFT.

Huitt-Zollars, Inc. / 3131 McKinney Avenue / Suite 600 / LB 105 / Dalles, Texas 75204-2489 / 214/871-3311 / FAX 214/871-0757

HUITT-ZOLIARS

February 13, 1998

Mr. Mark Person Gibson & Associates, Inc. P.O. Box 800579 Balch Springs, TX 75180-0579

RE: Addison Circle Phase I Public Infrastructure HZI Project No. 01-2013-02

Dear Mr. Person:

Gibson & Associates is authorized to proceed with the revision to the bolt pattern at the existing light foundation on the north side of Addison Circle. We will add 1 each to Item #259 to pay for the above mentioned work for a total cost of \$388.80.

Please call if you have any questions.

Sincerely,

HUITT-ZOLLARS, INC.

and E. Meyers

David E. Meyers, P.E.

cc:

Bryant Nail-Post Apartment Homes, L.P.

\\HZDALLAS1\DISK1\proj\01201301\MP021398_DOC

Huitt-Zollars, Inc. / 3131 McKinney Avenue / Suite 600 / LB 105 / Dallas, Texas 75204-2489 / 214/871-3311 / FAX 214/871-0757

HUITT-ZOLIAR

December 4, 1997

Mr. Mark Person Gibson & Associates, Inc. P.O. Box 800579 Balch Springs, TX 75180-0579

RE: Addison Circle Phase I Public Infrastructure HZI Project No. 01-2013-02

Dear Mr. Person:

The Town of Addison does not want to conduct a final walk-through for the above referenced project until the following items are addressed. Some of the items have been discussed on previous occasions at the site or during construction progress meetings.

- Re-work pavers at the north and south ends of Witt Place to eliminate ponding of water
- Fire hydrant at the NW corner of Addison Circle and Witt Place needs to be lowered.
- Eliminate ponding of water in the invert on Witt Place.
- Eliminate ponding of water on Morris Avenue, north side at Quorum Drive neckdown.
- Locate and adjust missing water valve on Goodman Avenue.
- Sanitary manhole lid at Northwest corner of Circle in front of Building "A" cannot be accessed.
- Large roundabout sign on Quorum Drive for southbound traffic does not meet pedestrian clearance requirements.
- Make sure bricks in vehicular areas have settled at the edge of the drop slabs. This was noted as a problem after the initial installation approximately one year ago. At that time your position was that the bricks would settle over time with exposure to vehicular traffic.
- Complete sidewalk base and brick around the perimeter of Bosque Park.
- Install water drinking fountains at Bosque park entrances including water service lines.
- Resolve issues with sidewalk sub-base on the northwest end of Goodman Avenue and install brick.

In addition, there is an area of pavement failure at the northeast portion of the roundabout which needs to be evaluated by Gibson and Associates. We do not recommend taking any action on this area until the condition is discussed with the Town.

\\HZDALLAS1\DISK1\proj\01201301\MP120497.DOC



PARKS & RECREATION

(972) 450-2851 · FAX (972) 450-2834

Post Office Box 144 Addison, Texas 75001

16801 Wastgrove

Irrigation Inspection Addison Circle - Phase I 12/8/97 by Jim Clark

1st Controller

- 1. #1 value box is broken and needs to be replaced. One head is not popping up (east tree well with grates).
- 2. #6 valve box lid won't stay shut, box may be deformed.
- 3. #9-13 are not working for some reason according to Gary.
- 4. Concrete pullbox is all broken up and will need to be replaced (in the north alleyway by Bosque Park).
- 5. In the alley and the northside of Building C there are several Hitt nozzles. They need to be changed to Toro.

2nd Controller

6. #4 has a pinched flex pipe on one of the tree wells by the southside of Morris.

In General:

- 7. Many heads are leaning and need to be plumbed.
- 8. Many nozzles are clogged and need clearing. All heads should have filters installed.
- 9. Some 12" HP pop-ups contacting tree fences and need to be relocated.
- 10. Clean out valve boxes and install pea gravel per specs.
- 11. Need as-build plan and station sequencing schedule.
- 12. Supply water history for tree wells.
- 13. Dedicated phone line to controllers is not installed and operational.
- 14. Question of irrigation for. proposed holly hedge installation along culvert along Morris Ave. and Paschal Mews

Jim Clark Irrigation Technician Town of Addison

HUITT-ZOLIARS

ډ,

2

Dallas • Fort Worth • Houston • El Paso • Phoenix • Tustin • Omtario • Albuquerque

FACSI	MILE TRANSMITTA	
Date: 2/13/98	Fax No	No. of Pages: Z
TO: Marts Person - 972-	557-1552	(Including Cover Sheet)
Michael Murphy - 972-	770-5129	
URGENT Z For Your Review	🗇 Please Call Upon Receipt	U Orig. To Follow By Mail
De: Addoson Corele Puplie Inf	, Thuse I	
	· · · · · · · · · · · · · · · · · · ·	
FROM Daniel Mar	tien	
SENT BY: JHILA DOUGH	TIME: 10'200	DATE: 2/3/98
4 yns nae ony prosens recenny de Factuale Trus 3/31 McKinney Annaet, * Sette 600 * Dd	unitici, planes contact the individual lister Llas, Texas: 75304-2489 • (214) 871-	aborn at (234) 873-3323. Thank you.

Hult Zollars, Inc. / 3131 McKinney Avenue / Skite 600 / LB 105 / Dallas, Texas 75204-2489 / 214/871-3311 / FAX 214/871 0/57

February 13, 1998

Mr. Mark Person Gibson & Associates, Inc. P.O. Box 800579 Balch Springs, TX 75180-0579

RE: Addison Circle Phase I Public Infrastructure HZI Project No. 01-2013-02

Dear Mr. Person:

Gibson & Associates is authorized to proceed with the revision to the bolt pattern at the existing light foundation on the north side of Addison Circle. We will add 1 each to Item #259 to pay for the above mentioned work for a total cost of \$388.80.

÷

Please call if you have any questions.

Sincerely,

HUTIT-ZOLLARS, INC.

and E. Meyor

David E. Meyers, P.E.

cc: Michael Murphy, P.E.-Town of Addison Bryant Nail-Post Apartment Homes, L.P.

WHZDALLAS1VDISK/Ipmj\0120130/IMP021398.DOC

Huilt-Zollars, Inc. / 3131 McKinney Avenue / Suite 600 / LB 105 / Dallas, Texas 75204-2489 / 214/871-3311 / FAX 214/871-0757

HUITT-ZOLIARS

September 1, 1998

Mr. John Baumgartner Director of Public Works Town of Addison PO Box 144 Addison, Texas 75001

Re: As-Built Drawings for Addison Circle Phase One HZ Proj. No. 01-2013-02

Dear John,

David Meyers and his staff have been updating the public infrastructure drawings for Addison Circle Phase One to reflect the changes that occurred during construction and we will be in a position to submit record sets to the Town very soon. Accordingly, we are once again at the point where we need to arrive at a certification statement that is acceptable to both the Town and our firm. Our challenge is to arrive at a certification that is worded strongly enough for the Town but which does not unduly transfer liability from the contractor to Huitt-Zollars. The basis for the appropriate statement is the nature of the activities for which Huitt-Zollars was employed during the construction. Our primary task was to observe the work by the contractor on a periodic (and sometimes frequent) basis such that we could be reasonably satisfied that construction was occurring in conformance with the plans and specifications. We were not employed for full-time inspection of every element of the public construction and therefore can not make any guarantees or warrantees, either expressed or implied. We do, however, firmly believe, based on our presence and observations, that the construction is in conformance with the intent of our design and that the plans accurately reflect the changes in the field. Accordingly, we propose the following certification for your consideration:

RECORD DRAWINGS

(DATE)

THIS DRAWING HAS BEEN MODIFIED FROM THE ORIGINAL DESIGN DRAWING TO REFLECT THE FIELD CHANGES THAT OCCURRED DURING CONSTRUCTION WHICH WERE DOCUMENTED AND FURNISHED TO THE ENGINEER BY THE CONTRACTOR. BASED ON THIS INFORMATION AND THE ENGINEER'S OBSERVATION OF CERTAIN CONSTRUCTION ACTIVITIES, TO THE BEST OF THE ENGINEER'S KNOWLEDGE AND BELIEF, THE PROJECT IS CONSTRUCTED IN CONFORMANCE WITH THE PLANS AND SPECIFICATIONS AND WILL FUNCTION AS DESIGNED.

Please give me a call with your opinion of this certification so that we may complete the as-built package and submit it to you.

Sincerely,

Huitt-Zollars, Inc.

Andrew C, Hakley, P.E.

Senior Vice President

I:\proj\01201302\AsBuilt/B090198.LTR.doc

•	HUITT-ZOLLARS 3131 McKinney Avenue DALLAS, TEXAS	<mark>5, INC.</mark> , Suite 600 75204	LETTER OF TRANSMITTAL
	(214) 871-331	1	ATTENTION Mr. Mike Murphy RE: Diske Murphy
	swn of Addese	n	Haddison Circle
<u> </u>	D. Box 9010		
14	801 Westgrome	Pr	
Ac	Icloson, Tr. 7507		
WE ARE	SENDING YOU Attac	ched □ Under separate cover via_	Max the following items:
	 Shop drawings Copy of letter 	Prints Plans Change order	S Samples Specifications
COPIES	OATE NO.		DESCRIPTION
		Approval letter on	rd sports
		for Pine Kell)	newy Vahavia pavers
			,
THESE A	RE TRANSMITTED as che	ecked below:	
	For approval	Approved as submitted	Resubmitcopies for approval
	🕅 For your use	Approved as noted	Submit copies for distribution
	🗙 As requested	Returned for corrections	Returncorrected prints
	□ For review and comm	nent 🗆	
	□ FOR BID\$ DUE	19	□ PRINTS RETURNED AFTER LOAN TO US
REMARKS	<u>.</u>		
	rlike,		
	We resear	rched our files for	Several hars and
	tourd th	nos letter regarding	Vehicular parcers.
	Pine Hou	Il also makes a	peclestran pavar that
	matches	The Vehicular, how	wever I could not find
	any dat	a tor them in the	, files
	<u> </u>	···· ^ · ·	
	Please	Call'it you have	any questions.
COPY TO			
		8	signed: //auid //heifers
		if enclosures are not as noted kind	ly notify us at once.

If enclosures are not as noted, kindly i 199 M

.



PUBLIC WORKS DEPARTMENT

(972) 450-2871

FILE DIZONSO

Post Office Box 144 Addison, Texas 75001

16801 Westgrove

June 12, 1997

Mr. David Meyers, P.E. Huitt-Zollars, Inc. 3131 McKinney Avenue, Suite 600 Dallas, Texas 75204

Dear David:

The Town of Addison has reviewed the brick submittal from Pine Hall Brick Company.

We have no objection to the use of the 2-3/4 inch English Edge Heavy-Duty Lugged Pavers on Witt Place and Paschal Place as proposed by Addison Circle One Ltd.

* к

Please call me if you have any questions or need additional information.

Sincerely,

John R. Baumgartner, P.E. Director of Public Works

Attachment: May 12, 1997 test results from PSI

Zeers ST NUC Garriana a * 50.44 + e¹ky

ini Dinistana semanana	λ.136. · · · · · · · · · · · · · · · · · · ·		
2511:1 <u>500</u> 11 N10(557455-70	CO9-11-10-10-10-10-10-10-10-10-10-10-10-10-	ASION INDEX	
	Number	Abrasidn'	
	97-1258-1/1: 97-1258-1/1: 97-1258-1/G 97-1258-C/H 97-1258-C/H	0.030 0.033 0.037 0.037	
	- 97-4258-13/J	0.034	
	Remarks: The u ASTM Index	nits tested comply with i C1272, Table 2, Abraxion Requirements for types R and F.	

EFFLORFSCENCE TESTS

Specimen Number	Test Rating
97-4258-K-Pair	Not Effloresced
97-4258-L-Fair	Nor Effloresced
97-4258-M-Puis	Not Efficienced
97-4258-N-Pair	Not Efforesced
\$7 4138 U Mar	Not Effloressed

MEASUREMENT OF WARPAGE

Top Surface Warpage:	All units less than 0.03 loches
Bottom Surface Warpage:	All units less than 0.03 inches

1

ъоs

いたのであっていた。

¢

06, 11, 97 08:57AM *METRO BRICK CC

HIGH REPARTS IN THE PROPERTY INTENTY IN THE PROPERTY INTERTY IN THE PROPERTY INTERTY I

910 721-7518

May 12, 1997 Page 3 of 3

1	Ξi	1	. 43 . 4.	" an Lin Li	1.1	6 Y	
		10.00		STICK	LICITE	2.0.7	
l.	Р.	1.1	a.			1.1	
i.		P DETT	943212121	- NATA		570	1103
ŧ	-1		\$V71-141			1 - A - A - A - A - A - A - A - A - A -	1 E

	Specimen Monutor	Average of 4 Measurements, R) Winth	Arringe of 4 Measurements, Langth	Average of 4 Measurements, Holght
	97-4258-P	3.94	7,93	2,75
	97-4258-Q	3.92	7.91	2.75
N - 2 E	97-4258-R	3.94	7,93	2.74
· .	97-4258-S	3.92	7.95	2.75
• •	97-4258-T	3.92	7.92	2.75
	97-4258-U	3.94	7.93	2.75
	97-4258-V	3.91	7.93	2.74
•	97-4258-W	3.90	7.91	2.75
	97-4258-X	3.94	7.93	2.74
	97-4258-Y	3.94	- 7.93	2.75
	Average:	3.93	7.93	2.75
	Remarks:	Measurements for one (1) spacer nib,	length and width in measured top and botto	clude thickness and Mi.

Respectfully submitted, Profystional Service Industries, Inc.

Richard B. Crew Department Manager Construction Services

RBC/jv

11

Copies:

1 - Pine Hall Brick Company, Inc./Ilerold Newman

EO3



Page 1 of 3

On 04-15-97, nominal 8 x 4 x 2-3/4 inch English Edge Heavy-Duty Pavers were submitted to our incorniory by Pine Hall Brick Company, Inc. Various physical tests were performed, and test results are as follows:

Specimen Number	Longth, Inches	Width, Inches	Gross Area, Sq. Inches	Total Lond, Lbs. Force	Gtoss Area Unit Load, pri
97-4258-A	3.95	3.85	15.21	222750	14640
97-4258-B	3.84	3.83	14,71	197000	13390
97-4258-C	3,94	3.86	15.21	208250	13690
97-4258-D	3.86	3.86	14.90	214000	14360
97-4258-E	4.04	3.86	15.59	212000	13600
:	-			Average:	13936

COMPRESSIVE STRENGTH (Sawed Brick Tested Flat-Wise)

WATER ABSORPTION (24-Hour Submetsion and J-Hour Bolly

Specimen Number	Absorption, % 24-Hour Submersion	Absorption. % 5-Hour Boiling	Seturation Coefficient
97-4258-1	4.43	7.59	0.58
97-4258-0	4.38	7.50	0.58
¥7-4258-H	5.06	8.23	0.61
97-4258-1	4.35	7.45	0.58
97-4258-J	<u>5.13</u>	8.33	0.62
Average:	4.67	7.82	Q.59
Renarks:	The units tested comply a Requirements for types R a	with ASTM C1272, T: and F.	uhle 1, Physical

Information To Build On

ional Bervico Industries, Inc. + 5319 West Mariot Sovert + Greensboro, NC 27409-2679 + Phono 910/264-0522 + Fax B10/202 2508

5.8 19	HUITT-Z 3131 McKinn DALLAS	OLLARS ley Avenue S, TEXAS	S, INC. , Suite 600 75204	LETTER	OF TRANSMITTA	\L	
	(214	4) 871-331	1	ATTENTION	01.2599.	2)	
TO					URPHY, P.E.		
	NN OF	ADDI	<u>20N</u>	ADDISON CIRCLE PHASE 2B			
Lee	BOLWES	ICR	WE KD	PUBLIC INT	FRASTRUCTURE		
SER ADD	ISON, T	<u>Enter</u> × 75	001	REVISIONS PER TOLR REVIEW			
WE ARE	SENDING YOU	🙀 Attac	ched ⊡ Under separate cover via_		the following items:	00 000 HBL - 00 - 00 - HB	
	Shop draw	ings	🛱 Prints 🗆 Plans	Samples	Specifications		
	Copy of le	tter	Change order □				
COPIES	DATE	NO,		DESCRIPTION			
3			REVISED SHTS GI	RI,GRZ, P	'II ≠ PI4		
			FROM THE PUL	BUC SET			
3			REVISED SHTS C	OPI & OP	-2		
			FROM THE PRI	VATE SE	T		
			·				
THESE A		ED as chi	ecked below:	D Pocubrit	conico for communi		
	For approv	/8I	Approved as submitted Approved as noted	🗆 Resubnin_	copies for approval		
	M As request	ed	Returned for corrections	Return			
	□ For review	and comn	nent 🗆				
	□ FOR BIDS DUE19			□ PRINTS RETURNED AFTER LOAN TO US			
REMARKS	•						
					·		
. <u> </u>	•					****	
COPY TO.	******		s	SIGNED:			

•

•

If enclosures are not as noted, kindly notify us at once.



.

10-20-33 · 3-20AM · HULL AVELONG

HUITT-ZOLLARS

		D Albuquerque - D	allas - Fort Worth - El Pe enver - Ontario - Phoeni	zso - Houston z - Seattle - Ta	coma - Tustin	
ate: 🛃	01-	5/99 2599	FACSIMILE TRANS	MITTAL 912-	458- 5	2837 2857
Att	tention:	Mi	Ke Mu	rphi		
Co	mpany:	Ta	un of	AL	lisan	
	Urgenț		Per Your Request	:	For Your R	eview
]	Please Call	Upon Receipt	Original To Follo	w ,	FYI	Other
	A	ligne	ment		······································	
· 	9	hase	<u>IB</u>	Ħ.	C.	
	1	· · ·	M			agaran yang di Sang Sang Yang Sang Sang Sang Sang Sang Sang Sang S
:: By ; /		wit	<u>II elje</u>	Time:	Date:	
:: Ву ; /	If you	have any problem	ns receiving this fax, plea	Time:	Date: 14) 871-3311	

.



- 	Dullus - Fort Worth - El Faso - Houston Albuquerque - Denver - Ontario - Phoenix - Seattle - Tacoma - Tuston RECEIV SEP 2 9 19 BV:	99
Date: IZ Jo	FACSIMILE TRANSMITTAL 24 - 220 - 106 [9 29 9 772 - Bids - 66 95 Including this cover sheet) Mile Pobling Including this cover sheet) Attention: Mile Pobling Company: Post Internet Urgent Vour Regnest For Your Regnest	
IOTES	Please Call Upon ReceiptOriginal To FollowFYIOduer /COMMENTS:	
ronu: cat By	<u>M. K. v.s.nal</u> 	
	If you have any problems receiving this fax, please call us at (214) 871-3311 3131 McKinney Avenue - Suite 500 - Dallas, Texas 75204 - (214)871-3311 - Fax (214)871-0757 Alternate Fax	

ж. * _____мъ /

,






; *,



ʻ, **ʻ**,

HORIZONTAL

Project	
Client	
Task	

· · · ·

HUITT

Job No	
Ву	Date
Chkd	Date
Sheet	of

.

COORDINATE	NORTH	CAST
D	11486.94	9234,77
C	11484.61	9379.32
3	11 325.50	9376.76
Ð	11324.61	9431,88
5	11484.94	9234,73
6	N 484.60	9255.56
Ð	11 463.32	9255.21

NOTE

4-3" CONDUCT. SEE DETAIL FOR INSTALLATION.

•

Addison Circle Construction Post Properties, Inc.

Fax Transmission

то	Dennis Bailey	FAX	NUMBER	(817)430	-9207
COMPANY	North Texas Contracting	PHONE	NUMBER	(817)430	-9500
FROM	Mike Robbins	DATE	9/29/99	PAGES	7
SUBJECT	Addison Circle Phase II-B Publi	c Infrastructure		j	1

Dennis: Attached is a copy of a correspondence received from Huitt Zollars with the requested electrical conduit layout information as requested by Mark Zellman. If you need any additional information, or are unable to read this fax transmission, please call.

Thanks You, Post Properties, Inc.

Mike Robbins Project Superintendent-Public Infrastructure



15720 QUORUM DR., ADDISON, TEXAS 75001

(214) 220-0684 (214) 220-1061 FAX

If you had any problems receiving this Facsimile Transmittal, please contact the individual listed above at (214) 220-0684. Thank You

HUITT-ZOLIARS

Dallas - Fort W Albuquerque - Denver - Ontar	orth – El Paso – Ho io – Phoenix – Seatt	usion le - Tacoma - Tustin	
FACSIMIL	E TRANSMITTA	1L	
Date: 9/23/99	Fax No: 214	-220-106	1
HZ Job No. 01 - 2599-01	No. of Pages	Z (Including this	cover sheet)
Attention: Mile Robbon	5		
Company: <u>Past Property</u>	y		
LUrgentPer Yo	our Request	For Your	Review
Please Call Upon ReceiptOrigin	al To Follow	FYI	Other
Server as ducussa	<u>ر ، </u>		
i			- -
rom: David Milly	es .		
ent.By: <u>TM</u>	Tim	e:Date:_	
If you have any problems receiving to 3131 McKinney Avenue - Suite 500 - Dallas, Te	his fax, please call exas 75204 - (214)?	us at (214) 871-331 871-3311 - Fax (214	l) <i>871-0757</i>



•

.

;10-14-99 ; 4:40PM ; HUTTT-ZOLLARS, INC. →

ŝ

HUI	<u>I</u> .	-20	LIA	RS
-----	------------	-----	-----	----

Dallas - Fort Worth - El Paso - Houston Albuavarave - Danver - Ontario - Phoeniz - Seattle - Taxana - Tustin
FACSIMILE TRANSMITTAL
Date: 10/14/99 Fax No: 972-774-3366
HZ Job No. 01-2599-01 No. of Pages 3 (Including this cover sheet)
Attention: Cindy HARRIS
Company: Post Properties
Urgent XPer Your Request For Your Review
Please Call Upon Receipt Original To Follow FVI Other
NOTES/COMMENTS
CC 'OMILE ROBBINS - PLOST PROPERTIES
E MILE MURPHY . TOWN OF ADDISON
ESX# 972-450-2837
(3) JAY FREE KTRL
FAX = 214 - 071 - 7025
From: David Mayers
Sent By : Time: Date: / 0 - 1 4
Keyes have no mableme receiving this for alasse all near (314) 971 1211
1 you may any proments receiving and tax, presse can us at (214) 071-3311
Alternate Fax

HUITT-ZOLIARS

Hultr-Zoltara, Inc. / 3131 McKinney Avenue / Suite 600 / LB 105 / Dallas, Texas 75204-2489 / 214/971-3311 / FAX 214/971-0757

October 14, 1999

Mr. Tom M. Sterling Texas Department of Licensing and Regulation Architectural Barriers Section 920 Colorado St. Austin, TX 78701

RE: Addison Circle Phase IIB Public Infrastructure (Formerly Addison Circle Phase III) TDLR Project # EABPRJ99009188 Huitt-Zollars Project # 01-2599-01

Dear Mr. Sterling,

Thank you for your September 18, 1999 review of our plans originally submitted to TDLR in April 1999. Please find the enclosed signed and sealed set dated 6/23/99 "Issued For Construction". This set is being supplied for your records.

We offer the following response to the items noted as "Please Respond" in your review.

4.3.7 Slope of Accessible Route.

Variance request for up to a 5% sidewalk cross slope was denied by your office. A 3% maximum is allowed per your letter dated 10/4/99. We have revised the grading plans to reflect a 3% maximum slope at all locations with the exception of the northeast corner of Morris Avenue and Artist Way. The grade around the corner on the street results in a sidewalk grade of 3.7% at this isolated location. All other sidewalk cross slopes have been brought into compliance with the 3% maximum.

4.6.1 Minimum Number of Accessible Spaces.

Accessible parking spaces are being provided on the parking garage structure located in Block 3B. (West side of Artist Way) A total of 7 accessible spaces is being provided. This garage structure also supplies the required parking for all tenants for this development.

.....

Mr. Tom M. Sterlong October 13, 1999 Page 2

4.7 Curb Ramp - Surface.

We have revised our detail to indicate truncated domes instead of grooves.

Please call if you have any further comments or questions.

Sincerely,

HUITT-ZOLLARS, INC.

and E. Meyoo

David E. Meyers, P.E. Project Manager

DEM/em

Cc: Cindy Harris – Post Properties Mike Robbins – Post Properties Mike Murphy – Town of Addison Jay Frisco – RTKL

HUITT-ZOLIARS

:

Dallas • Fort Worth • Houston • El Paso • Phoenix • Tustin • Ontario • Albuquerque • Seattle • Tacama

FACSIMILE TRAN	ISMITTAL
) Date: 10/23198	Fax No.: See Below
H-Z Proj. No. <u>01 201310</u>	No. of Pages: 4 (Including Cover Sheet)
TO: Mike Robbins (Post) 972-866-656	o
Bryant Nail (Post) 972-770-5129	
Mike Murphy (Addisn) 972-450-2	837
URGENT For Your Review Please Call Upo	n Receipt Orig. To Follow By Mail
Re: AC 2 Sand Testing	·
Another Copy of Jone 25th let	er stating we
need a gypsom free sand.	
Act 22nd letter. Test of S.	and Sunder Submitted
by Bauman	n Construction, States that
trace amount	s of Juppson may loe
present ha	wever they were so small
that definition	re identification was not psaille.
	·
	<u>_</u>
D Manere a	
SENT BY: Author T	IME: 3:45 1 DATE: 10/23
If you had any problems receiving the Facsimile Transmittal, please con	stact the individual listed above at (214) 871-3311. Thank you.
3131 McKinney Avenue, • Suite 600 • Dallas, Texas 752	04-2489 • (214) 871-3311 • FAX (214) 871-0757

WJE

Wiss, Janney, Elstner Associatas, Inc. Engineers, Architects, Material Scientists 120 Nonk LaSalle Struct, Suite 2000 Chicago, It. 60602 (312) 372-0555 faz: (312) 372-0873 http://www.wjs.com

Hisadiquartara Marabassá, SL

<u>C'in</u>

October 22, 1998

Via: Fax and Mail

Officials	Marcal State 2
Asiante	Mir. Sryant Nau
Clime	Post Properties 19861 Dellas Bedriver, Suite 855
Soliat	l Jauj Lening F ulk way, July 900 Idalila TV 78940
Deper	2791189, 1.A. 72649
Denne	Re: Addison Circle Phase II Public Infrastructure
Hannah Ale	Addison, Texas
Linnyhie	Analysis of Sand Sample
Prisonne	WJE No. 980769
San Françoisse	
Sentir	Dear Mr. Nail:
Mailington, DC	
	In accordance with the request of David Meyers of Huitt-Zollars, your project engineer, Wise,
ENA Division	Janney, Elsmer Associanes, Inc. (WJE) has performed an additional investigation of a sand
Naradinani, II.	sample for setting the brick pavers at the referenced project. WIE previously performed an
Austin	analysis of a "Phase II" sand sample in which we reported that gypsum was detected.

analysis of a "Phase II" sand sample in which we reported that gypsum was detected. (Reference our June 25, 1998 letter) Subsequent to that test, we were informed that the previous sample might not have been carefully selected to avoid contamination. Therefore, a new clean and sample was submitted. The sand was extracted with water and the extraction residues were analyzed for crystalline

The sand was extracted with water and the extraction residues were analyzed for crystalline components by X-ray diffraction. Trace amounts of gypsum may be present in this sample, however at trace levels a definitive identification was not possible with this procedure. The test procedure also does not allow us to quantify the difference in the gypsum between the first and the second samples.

Should you have any questions, please call.

May truly yours,

Bruce S. Kaskel Project Manager

BSK:db

co: D. Meyers (Huitt-Zollars, Inc.) w/ Bnel.

an the men is the measure is attracted and and assure assure





Wiss, Janney, Elstner Associates, Inc. Engineers, Architects, Material Scientists 120 North LaSalle Street, 20th Floor Chicago, IL 60602 (312) 372-0555 FAX: (312) 372-0873

HUITT-ZOLLARS RECEIVED

JUN 2 9 1998

Via: Fax and Mail

A D. BETEC AGANDAR C.M. JATENIK M.G. HANNE P.C. HOME P.C. HOME P.C. HOME M. MARGENIK S. JANAR S. JANAR S. JANAR S. JANAR

TIC COMMOLY TIC COMMOLY ART DINO June 25, 1998

Mr. Bryant Nail Post Properties 15851 Dallas Parkway, Suite 855 Dallas, TX 75248

Re: Addison Circle Phase I Public Infrastructure Discoloration of Brick Pavers WJE No. 980769P

Dear Mr. Nail:

In accordance with your authorization, Wiss, Janney, Elstner Associates, Inc. (WJE) has performed an investigation of the discoloration occurring on brick pavers installed on the aforementioned project. We were informed by David Meyers of Huitt-Zollars, your project engineer, that the Phase I brick pavers have been installed in a sand setting bed over a cast inplace concrete slab on grade. Sand with portland cement were used to grout the joints between brick units. We received a detail from Huitt-Zollars indicating the typical installation.

To perform our investigation we received the following materials:

- · Two bricks removed from the pavement that showed the discoloration on the top surface
- One brick that was reportedly not installed
- One sand sample identified as "Phase I setting bed"
- One sand sample identified as "Phase II setting bed"

The samples were submitted to our Erlin, Hime Associates division for petrographic and chemical study. Their report is attached. Based on their findings, we conclude the following:

- The discoloration material is a combination of calcium carbonate, gypsum, portland cement, calcium hydroxide, fly ash and some other unidentified material. The gypsum may have come from the brick paver or the sand. Gypsum was detected in the Phase II sand sample. Some white efflorescence was observed in the unused brick sample when tested for efflorescence potential. The other materials may be due to construction debris or from residue from the grout placed between the pavers.
- 2. Attempts were made to clean the material off the brick pavers. Only two acidic cleaners had a slight improvement in removing the material. Repetitive applications of these cleaners would be necessary to have any appreciable effect. Since this application may cause deterioration of the joint grout, field testing is recommended prior to full scale cleaning, with special attention to the effects of the cleaning to the pavers and grout. Additionally, prewetting must be thorough.

NATIONAL CONTRACTOR

Page 2

Wiss, Janney, Eistner Associates, Inc

Mr. Bryant Nail Post Properties

June 25, 1998

3. We understand that the Phase II work has not yet been built. Sand used for Phase II should be gypsum-free. Bricks should not efflorescence when tested in accordance with ASTM C67. Care should be taken in keeping the site clean during and after pavement installation to avoid construction debris contaminating the pavement.

star ar .

. 1 e

* 🧿 🐮

Should you have any questions, please call.

Vory truly yours,

Bruce S. Kaskel Project Manager

BSK:db Enclosure

D. Meyers (Huitt-Zollars, Inc.) cc:

SENT BY XEROX 7000

TUTTI-ZULLARS, INC. -10-14-10 · 0-10AM ·

ł



Dallas • Fort Worth • Houston • El Paso • Phoenix • Tustin • Ontario • Albuquerque • Seattle • Tacoma

FACS	SIMILE TRANSMITT	TAL
Date: 6/14/99		No.: See Below
H-Z Proj. No. 01- 2013-10	<u> </u>	No. of Pages: 3 (Including Cover Sheet)
O: Mike Robbins- Post-	972- 266-6695	
Mille Morthy Tawn of	Allin 972-450	- 2837
JRGENT Ø For Your Review	Please Call Upon Receipt	Orig. To Follow By Mail
Re: Addown Corche	Phone Tus	
Coorton Drive	Tree (Neils	
,	,	
		<u> </u>
· · · · · · · · · · · · · · · · · · ·		· ·
OM: Trend Millinger	······································	_
Thu B		nom la cur ala

n had any problems receiving the Facsimile Transmittal, please contact the individ 4))

3131 McKinney Avenue, • Suite 600 • Dallas, Texas 75204-2489 • (214) 871-3311 • FAX (214) 871-0757

Huitt Zollars, Inc. / 313T McKinney Avenue / Suite 600 / LB 105 / Dalkas, Texas 75204 2489 / 214/871-3311 / FAX 214/871-0757

June 14, 1999

Mr. Mike Robbins Post Properties, Inc. 15720 Quorum Drive Addison, TX 75001

RE: Addison Circle Phase II Public Infrastructure HZI Job # 01-2013-10

Dear Mike,

Enclosed please find a sketch indicating the removal and replacement limits for concrete base adjacent to the tree wells on the enst side of Spectrum Drive north of Addison Circle. As you indicated, the tree well leaveouts are not at the correct location when measured from back of curb.

It is our recommendation that the concrete be sawcut and removed from back of curb to back of walk for the full length of the tree wells. The area should then be filled and compacted to meet density requirements. Then the concrete base should be repoured with the tree well leaveout at the correct location as indicated on the plans.

Please call if you have any questions.

Sincerely,

HUITT-ZOLLARS, INC.

Juil 5. Meyers

David E. Meyers, P.E.

DEM/cm

Enclosure

Cc: Mike Murphy – Town of Addison

Whatfollog Work Experience 120 120 120 120 MR-ACHINE PPL doc

- --- *** *** *





HUITT-ZOLIARS

٦,

ź

Dallas + Fort Worth + Houston + El Paso + Phoenix + Tustin + Ontario + Albuquerque

ate: 4/21/98	Fax No	N
-Z Proj. No. 01 201310		No. of Pages: 3
0: Mike, Robbins- Post	972-50-6695	- (menuing Cover Sheer)
John Baringator	972-450-2837	-
URGENT T For Your Review	Please Call Upon Receipt	- 🛛 Orig. To Follow By Mai
Re: A.c. It		
		· · · · · · · · · · · · · · · · · · ·

•,.

......

;

HULL X MARS

Hull-Zollars, Inc. / 3131 McKinney Avenue / Suite 600 / L5 105 / Dollas, Texes 75204-2489 / 214/871 3311 / FAX 214/871-0757

April 21, 1998

Mr. Mike Robbins Post Apartment Homes, L.P. 15851 Dailas Parkway Suite 855 Dallas, TX 75248

RE: Addison Circle Phase II Public Infrastructure HZI Project No. 01-2013-10

Dear Mike:

There has been some confusion recently about what brick is acceptable for use in the streets and sidewalks. The construction plans call for the following:

<u>Item 119</u> :	ACME Vehicular Brick Paver Type "C" Tulsa, Blend 2 Garnet Red; To be
	used in all vehicular areas except Mildred Place and Lewis Place.
<u>Item 120</u> :	Glen Gery Vehicular Brick Paver Type "A", Cocoa and Type "B", K&W
	Old Smokic; To be used in Lowis Place and Mildred Place.
Item 265 :	Glen-Gery Pedestrian Brick Paver Type "A", Brown and Type "B", Autumn
	Haze: To be used in all pedestrian areas.

The contractor has informed Huitt-Zollars that the Glen-Gery vehicular pavers (Item No. 120) are not available. On Phase I an alternate brick, manufactured by the Pine Hall Company, was approved to take the place of the Glen-Gery vehicular pavers on the mews streets only.(Witt Place and Paschal Place) We can use the same Pine Hall paver on Phase II for Mildred Place and Lewis Place, however, all test results must be submitted for the record and the color must be approved by Paul Shaw. It is in everyone's best interest to have this information documented specifically for Phase II since it is a separate contract from the pavers installed under Phase I. In addition, if Pine Hall vehicular pavers are used in the above mentioned streets then a Pine Hall pedestrian paver must be submitted for approval to be used on the sidewalks in this area to maintain continuity with the brick color and texture.

\UIZDALLASI\DISK1\mm701201302\10\mm0421\8.doc

Dallas / Fost World / Houston / Fi Paso / Phoenix / Tustin / Onterio / Albuquorquo

Page 2 Robbins April 21, 1998

The contractor is operating at his own risk if pavers other than those shown in the construction plans are being installed. I highly recommend that the contractor submit test results and sample bricks for all applications to Paul Shaw for review and approval. Paul is also available to review samples in the field with the contractors if necessary. This is the only way to insure that the Town and Post is getting the desired result with brick colors, patterns and quality.

Please call if you have any questions.

Sincerely,

HUITT-ZOLLARS, INC.

and E. Meyers David E. Meyers, P.E.

Cc: John Baumgartner - Town of Addison

\HZDALLASI\DISKI\proj\01201302\10\ma042198.doc

HUITT-ZOLLARS

Dallas • Fort Worth • Houston • El Paso • Phoenix • Tustin • Ontario • Albuquerque

FACSI	MILE TRANSMITTAL
Date: 2/24/98	Fax No.: Seve Belbes.
H-Z Proj. No. 01 20 31	No. of Pages: 3 (Including Cover Sheet)
TO Linda Jacobs - 817.	-731-9122 U. Hechnologies. inc.
Mike Robbens - 972-	866-6695-POST
Mike Munphy - 972-	450-2837- Addison
URGENT A For Your Review	Please Call Upon Receipt D Orig. To Follow By Mail
Brian Duplechin-	972-385-3505 - Churter
David Helbard-	214 969+3302 - HRS
RE: Adducon Cir	zle Phase I
Revision to The	Lephone Conduct plan
* Added Conduct For	s to equat Swat monthole
on Quarium Driv	es and Dallas Parkway.
 Added Conducts in bldg and Gauge an north force 	private drive between office e; Deleted Connection point of office bldg.
FROM Jaure Mey	lers
SENT BY:	TIME: DATE:
If you had any problems receiving the Facetonic Tran	mettel, plance contact the andividual ligned above at (214) 871-2311. Therek you.
3131 McRimuy Avanue, + Suite 600 + Da	Gan, Texas 73204-2489 + (214) 871-3311 + FAX (214) 871-0757





- 3 voir will we pay \$4600.00 1 Town will go halfs an 4 10,000 \$ 2500.00 33 Split welding ust on joints / cities $(\infty, +$ {13th & 17th } UNTIL Fineshed M.C.I. reinburgement from 25000 town



PUBLIC WORKS DEPARTMENT

Post Office Box 144 Addison, Texas 75001

(972) 450-2871

16801 Westgrove

March 20, 1998

Mr. David Meyers, P.E. Project Manager Huitt-Zollers 3131 Mckinney Avenue Suite 300 / LB 105 Dallas, Texas 75204-2489

Dear David,

Per items discussed during our meeting on March 13, 1998 I submit the following:

In our PPRC comments dated January 16, 1998 you requested clarification and/or reasoning for Item Number 2 which states;

Consideration should be given to widening the intersection of Airport Parkway (currently a two-lane, nondivided, 36 foot wide roadway) at Quorum drive to permit for the construction of one right turn lane, one through lane, and one left turn lane in each direction, This will require a dedication of an additional ten (10) feet of right-of-way on the south side of Airport Parkway, a fifteen (15) foot clip off the south east and south west corners to accommodate truck traffic, and participation in construction costs. All building setbacks and streetscape plans must reflect this right-of-way dedication.

Based on similar conditions we are currently experiencing along Westgrove Drive and Quorum Drive and with anticipated completion of the Keller Springs Toll Tunnel, Addison Circle Phase II, Addison Road Widening and the New Arapaho Road projects. We feel that it is in the best interest of the Town to have these updates performed now instead of waiting until traffic congestion becomes critical.

As per your request to construct a "lay down curb" with a 1 inch lip where Spectrum Drive crosses Addison Circle and leaving the street crossover at grade, we respectfully deny this request and will require standard curb and gutter and street section.

Please call if you need additional information.

Sincerely,

inny

Michael E. Murphy, P.E. Assistant Director of Public Works / Town of Addison

Xc: John Baumgartner, P.E. / Director of Public Works / Town of Addison

HUITT-ZOLIARS

Dallas + Fort Worth + Houston + El Paso + Phoenix + Tustin + Ontario + Albuquerque

	ANSMITTAL
Nate: 3/27/98 I-Z Proj. No. 01201310	Fax No: <u>955-See Belaw</u> No. of Pages: <u>Z</u> (Including Cover Sheet)
O: Town of Addison Attn'. Mike Murphy 972-4 POST; Attn. M: Ke Robbins	<u>50-2831</u> <u>72-866-66</u> Call Upon Receint X Orig. To Follow By Mail
RE: Addison Circle Ph. 24" Wester Main	<i>I</i>
IOM David Meyors	

.

Hull-Zollars, Inc. / 2131 McKinney Avenue / Sulte 600 / LB 105 / Dallas, Texas 75204-2489 / 214/871 3311 / FAX 214/871-0757

March 27, 1998

Mr. Michael E. Murphy, P.E. Assistant Director of Public Works Town of Addison P.O. Box 9010 Addison, TX 75001-9010

RE: Addison Circle Phase II Public Infrastructure HZI Project No. 01-2013-10

Dear Mr. Murphy:

We are in receipt of a change order request from North Texas Contracting in the amount of \$10,920. As stated in the letter from Dennis Bailey, the additional cost is a result of the Town of Addison requesting that the 24" water main installation take place 24 hours per day until complete.

We believe the intent was for the contractor to install the main line during normal working hours and that only the connection to the existing main must be a continuous effort until the work is complete. Section VII of the Technical Specifications which is titled, <u>SUPPLEMENTAL WATER LINE CONSTRUCTION</u> <u>SPECIFICATIONS</u>, states the following:

Execution

6. Lost paragraph

"The Contractor should expect that most interruptions in water service must occur at offpeak hours and he should therefore plan to work through the night and on weekends for most of the connections to existing water." Ĭ

ţ

1

It is clear that the contractor should have made provisions in his bid for continuous work through the night when making connections to existing water, therefore the request for additional money should be evaluated by the Town on that basis.

Please call if you have any questions or need additional information.

Sincerely,

HUTTT-ZOLLARS, INC.

David E. Meyers David F. Meyers, P.E.

David F. Meyers, P.E. Project Manager

Cc: Mike Robbins – Post Apartment Homes, L.P.

\\HZDALLASI\DISK1\proj\01201302\10\mun032798.doc

Dallas / Fort Wurth / Houston / Fl Peso / Phoenix / Tuchn / Onland / Albuquerque

Huiti-Zollars, Inc. / 3131 McKinney Avenue / Suite 600 / LB 105 / Dallas, Texas 75204-2489 / 214/871-3311 / FAX 214/871-0757

HUITT-ZOLIARS

March 31, 1998

Mr. Michael E. Murphy, P.E. Assistant Director of Public Works Town of Addison P.O. Box 9010 Addison, TX 75001-9010

RE: Addison Circle Phase II Public Infrastructure HZI Project No. 01-2013-10

Dear Mr. Murphy:

Enclosed please find a schematic drawing illustrating the proposed revision to the current design for the Spectrum Drive esplanade area. It has been the intent throughout the planning stages to have this section of pavement at the same, or at least appear to be at the same, level as the park to create a plaza effect. The city had many concerns about raising the pavement to the level of the park and a resolution was not reached prior to the job going out for bid. As a result the current design calls for a standard curb and gutter section.

We propose to revise the current design as follows:

- Transition from a 6" curb to a small valley gutter section which will slope 2" vertically in 2 horizontal feet from the gutter line on Spectrum Drive. This valley gutter section will occur between the curb returns at the Spectrum Drive and Addison Circle intersections.
- Slope the park at 2% to the valley gutter on the west side of Spectrum and at 2% away from the valley gutter on the east side of Spectrum.
- Add steel bollards on 10' centers 2' back from the gutter line of Spectrum Drive.

This will help to create a plaza effect without changing the profile grade of the roadway and will allow Spectrum Drive to function properly using stop sign control or signals if traffic warrants a signalized intersection in the future. The entire esplanade area will be brick pavement as currently shown on the design plans.

function properly if we construct the small valley gutte CAM following sketch.

We hope this is an adequate compromise that will create the out to achieve as well as addressing the safety concerns scheduled for paving soon, therefore we would appreciate proposed revisions.



and planners set 10w this area is e review of the

llustrated on the

\\HZDALLAS1\DISK1\proj\01201302\10\mm033198.doc

Please call if you have any questions or need additional information.

Sincerely,

.

HUITT-ZOLLARS, INC. Janel E. Meyers, P.E.

Cc: Mike Robbins - Post Apartment Homes, L.P.





Huitt-Zollars, Inc. / 3131 McKinney Avenue / Suite 600 / LB 105 / Dallas, Texas 75204-2489 / 214/871-3311 / FAX 214/871-0757

HUITT-ZOLIARS

March 9, 1998

Mr. Michael E. Murphy, P.E. Assistant Director of Public Works Town of Addison 16801 Westgrove Drive P.O. Box 9010 Addison, TX 75001-9010

Re: Addison Circle Phase II Private HZ Proj. No. 01-1822-30

Dear Michael:

Enclosed please find two sets of the revised plans for the above mentioned project which address the review comments dated January 26, 1998. I have listed your comment below followed in italics by the action taken.

- 1. Complete Sheet HC1. We have added the dimensions to building footprints for "N" and "P". Buildings "M" and "Q" will follow in the near future.
- 2. Show typical clean-out detail flush with finish grade (Sheet M1). Done..
- Change MTS to Addison Circle Access Ltd. (Sheets M2 and M3). Done.
- 4. Show embedment detail with 6" min. under PVC pipe (Sheet M1). *Done.*
- 5. Note on plan sheets GR1 to GR6 that no private encroachments shall be allowed except as follows: 0' to 10' - none, 10' to 20' - one foot, 20' plus - eight foot unless specifically pre-approved. This includes all windows, doors, handrails, balconies, lights, gutters, etc. Done.
- 6. The first rise to the first step from the right-of-way shall be no closer than one foot from the right-of-way where a handrail is required to meet handrail requirements per A.D.A. This includes the Town homes on Morris Avenue. At this point the town homes are just in the schematic design stage and the footprint shown on the civil drawings is to assist in utility and alley design. The noted comment should be directed to the architect at the time of final design of the Town homes. Contact Bryant Nail with Post about the schedule for construction on the town homes.

-

WIZDALLAS2\DISK2\projV01182230\MM030998.doc

- Relocate stairs from visibility triangle at southwest corner of Morris Avenue and Mildred Place (Sheet GR2).
 We have moved the stairs, however the footprints shown are schematic design only and may change prior to the final construction documents being submitted to the Town.
- 8. Show location of trash compactor pick-up for compactor located at southeast corner of Quorum Drive and Addison Circle Drive Pick up shall be south of inlet (Sheet GR3). *Location is noted on the Public Infrastructure paving plans.*
- Provide supplier and identify "Poly" pipe on plans provide cut sheets (Sheet D1 to D14).
 All poly pipe has been deleted from the construction documents.
- 10. Provide proposed locations of all lay down curbs for compactor service. Locations are noted on the Public Infrastructure paving plans.
- Change curb line inlet to recess inlet at the southwest corner of Dallas parkway and Addison Circle Drive (Sheet GR6).
 Change has been made and incorporated into the Public Infrastructure drainage plans.
- 12. Note that all private drainage located in right-of-way shall be min. of 8" PVC. The plans now reflect a minimum of 8" PVC in the public right-of-way.
- 13. Show locations of private drainage clean-outs where change of direction is greater than 90 degrees.
 Private drainage clean-outs are called for at approximate 100 foot intervals and all changes in direction as called for in Note #6 on the construction documents.
- 14. Provide locations of stabilized construction entrances to all disturbed site areas that access the public streets (Sheet Pc1) i.e.: add not to the plans. *Done.*

Please call if you need additional information.

Sincerely, HUITT-ZOLLARS, INC.

and E. Meyers David E. Meyers, P.E.

David E. Meyers, PJ Project Manager



a

PUBLIC WORKS DEPARTMENT

(972) 450-2871

Post Office Box 144 Addison, Texas 75001

16801 Westgrave

January 26, 1998

Mr. David Meyers, P.E. Huitt-Zollars, Inc. 3131 McKinney Ave., Suite 600 Dallas, Texas 75204

Re: Addison Circle Apartments Phase II Private Plans Review

Dear David:

The Public Works Department has reviewed the plans for the referenced project and has the following comments:

- 1. Complete sheet HC1.
- 2. Show typical clean-out detail as flush with finish grade (Sheet M1).
- 3. Change MTS to Addison Circle Access Ltd (Sheets M2, and M3).
- 4. Show embedment detail with 6" min. under pvc pipe (Sheet M1).
- 5. Note on plan sheets GR1 to GR6 that no private encroachments shall be allowed except as follows: 0' to 10' none, 10' to 20' one foot, 20' plus eight foot unless specifically pre-approved. This includes all windows, doors, handrails, balconies, lights, gutters, etc.
- 6. The first rise to the first step from the right-of-way shall be no closer than one foot from the right-of-way where a handrail is required to meet handrail requirements per A.D.A. This includes the Town homes on Morris Avenue.
- 7. Relocate stairs from visibility triangle at southwest corner of Morris Avenue and Mildred Place (Sheet GR2).
- 8. Show location of trash compactor pick-up for compactor located at southeast corner of Quorum Drive and Addison Circle Drive Pick up shall be south of inlet (Sheet GR3).
- 9. Provide supplier and identify "Poly" pipe on plans provide cut sheets (Sheet D1 to D14).

Mr. David Meyers January 26, 1998 Page Two

- 10. Provide proposed locations of <u>all</u> lay down curbs for compactor service.
- 11. Change curb line inlet to recess inlet at southwest corner of Dallas Parkway and Addison Circle Drive (Sheet GR6).
- 12. Note that all private drainage located in right-of-way shall be min. of 8" pvc.
- 13. Show locations of private drainage clean-outs where change of direction is greater than 90 degrees.

٠.

14. Provide locations of stabilized construction entrances to <u>all</u> disturbed site areas that access the public streets (Sheet PC1) ie: add note to the plans.

Should you have any questions please contact me or Bruce Ellis at 450-2871.

Sincerely,

Mike E. Munghy

Michael E. Murphy, P.E. Assistant Director of Public Works

cc: Bruce Ellis

Huitt-Zollars, Inc. / 3131 McKinney Avenue / Suite 600 / LB 105 / Dallas, Texas 75204-2489 / 214/871-3311 / FAX 214/871-0757

HUITT-ZOLIARS

January 28, 1998

Ms. Jeanne Hooker Lone Star Gas 2095 N. Collins, Suite 101 Richardson, TX 75080

RE: Addison Circle Phase II Town of Addison HZI Project No. 01-1822-21

Dear Ms. Hooker:

We are in receipt of your sketch showing the routes for gas lines in this development. It is our understanding that you have hired E.L. Dalton to install the gas mains.

It is critical to the schedule of the construction that your contractor install the mains on M-2 South (Lewis Place) and M-2 North (Mildred Place) as soon as possible. The gas mains on the above mentioned streets is located under the concrete street pavement due to the limited space under the sidewalk. This was discussed in an on-site meeting on November 3, 1997. Post will begin liming and paving operations on these streets in the next couple of weeks.

Please have your contractor contact Mike Robbins with Post Apartment Homes, L.P. at 972-726-0347. Thank you for your assistance in this matter

Sincerely,

HUITT-ZOLLARS, INC.

and E. Merpour

David E. Meyers, P.E.

Cc: Mike Robbins, Post Apartment Homes, L.P. Bryant Nail, Post Apartment Homes, L.P.

\HZDALLAS2\DISK2\proj\01182221\LSG422.LTR
Huitt-Zollars, Inc. / 3131 McKinney Avenue / Suite 600 / LB 105 / Dallas, Texas 75204-2489 / 214/871-3311 / FAX 214/871-0757

HUITT-ZOLIAR

April 22, 1997

Ms. Jeanne Hooker Lone Star Gas 2095 N. Collins, Suite 101 Richardson, TX 75080

RE: Addison Circle Phase II Quorum Drive and Mildred Street (to be renamed Addison Circle) Town of Addison HZI Project No. 01-1822-21

Dear Ms. Hooker.

The Town of Addison has hired Huitt-Zollars, Inc. for the engineering design of the public infrastructure for Addison Circle Phase II, a multi-family residential and retail development located near the intersection of Quorum Drive and Mildred Street (soon to be renamed Addison Circle). Back in November we sent schematic drawings showing preliminary layouts of paving, drainage, water and wastewater, electrical duct bank and typical utility sections. Enclosed please find updated site plan drawings showing the latest layouts of paving and utilities along Dallas Parkway and the DART right-of-way adjacent to the proposed development.

After working through Phase I together, we have a good understanding of your existing facilities, however, we need to verify the location of proposed Phase I facilities with as-built plans if they are available. In addition, we want to understand what your needs will be for Phase II within the public right-of-way. Please review the proposed development and indicate where proposed facilities will be desired. We would be glad to meet and discuss your facilities in person at your convenience.

Thank you for your assistance in this matter and please feel free to call if you have any questions.

Sincerely,

HUITT-ZOLLARS, INC.

and E Meyors

David E. Meyers, P.E.

Enclosures:

Site plan drawings Mapsco 4Z

G:/PROJ/01182221/LSG422.LTR

Hutt-Zollars. Inc. / 3131 McKinney Avenue / Suite 600 / LB 105 / Davias, Texas 75204-2489 / 214/871-3311 / FAX 214/871-0757

11 ITT-ZOLIARS

November 22, 1996

Ms. Jeanne Hocker Lone Star Gas 2095 N. Collins, Suite 101 Richardson, TX 75080

RE: Addison Circle Phase II Quorum Drive and Mildred Street (to be renamed Addison Circle) Town of Addison HZI Project No. 01-1822-21

Dear Ms. Hooker.

The Town of Addison has hired Huitt-Zollars, Inc. for the engineering design of the public infrastructure for Addison Circle Phase II, a multi-family residential and retail development located near the intersection of Quorum Drive and Mildred Street (soon to be renamed Addison Circle). Enclosed please find Mapsco 4Z and schematic drawings showing preliminary layouts of paving, drainage, water and wastewater, electrical duct bank and typical utility sections.

After working through Phase I together, we have a good understanding of your existing facilities, however, we need to verify the location of proposed Phase I facilities with as-built plans if they are available. In addition, we want to understand what your needs will be for Phase II within the public right-of-way. Please mark the locations of proposed lines for Phase II on the attached drawings. We would be happy to meet and discuss your facilities in person at your convenience.

Thank you for your assistance in this matter and please feel free to call if you have any questions.

Sincerely,

HUITT-ZOLLARS, INC.

mid E. Mayers David E. Meyers, P.E.

Attachment:

Schematic Plans Mapsco 4Z

G:PROM1182221/LSG.LTR

HUITT-ZOLIARS

Dallas + Fort Worth + Houston + El Paso + Phoenix + Tustin + Ontario + Albuquerque

	*
Date: 5/3//78	Fax No .: Sen Buchan
I-Z Proj. No. OL ZOIZLA	No. of Páges: (Including Cover Sheet)
o Mike Murphy 772-4	51-2837
Mike Robbins 972-8	66-6495
]
URGENT Y For Your Review U Pla	ease Call Upon Receipt 🛛 🗆 Orig. To Follow By Mail
RE: Addison Circ	le II
IOM: Danal Mayo	

•

~

HUITT-ZOLIARS

Huitt-Zollars, Inc. / 3131 McKinney Avenue / Suite 600 / L9 105 / Dallas, Taxa3 75204-2489 / 214/871-3311 / FAX 214/871-0757

March 31, 1998

Mr. Michael E. Murphy, P.E. Assistant Director of Public Works Town of Addison P.O. Box 9010 Addison, TX 75001-9010

RE: Addison Circle Phase II Public Infrastructure HZI Project No. 01-2013-10

Dear Mr. Murphy:

Enclosed please find a schematic drawing illustrating the proposed revision to the current design for the Spectrum Drive esplanade area. It has been the intent throughout the planning stages to have this section of pavement at the same, or at least appear to be at the same, level as the park to create a plaza effect. The city had many concerns about raising the pavement to the level of the park and a resolution was not reached prior to the job going out for bid. As a result the current design calls for a standard curb and gutter section.

We propose to revise the current design as follows:

- Transition from a 6" curb to a small valley gutter section which will slope 2" vertically in 2 horizontal feet from the gutter line on Spectrum Drive. This valley gutter section will occur between the curb returns at the Spectrum Drive and Addison Circle intersections.
- Slope the park at 2% to the valley gutter on the west side of Spectrum and at 2% away from the valley gutter on the east side of Spectrum.
- Add steel bollards on 10' centers 2' back from the gutter line of Spectrum Drive.

This will help to create a plaza effect without changing the profile grade of the roadway and will allow Spectrum Drive to function properly using stop sign control or signals if traffic warrants a signalized intersection in the future. The entire esplanade area will be brick pavement as currently shown on the design plans.

Another concern with a depressed curb section is the ability of the roadway to adequately drain. The largest drainage area in the valley gutter area is 0.04 acres which equates to a 100 year gutter flow of 0.31 cfs. The gutter flow capacity for this section of street keeping one dry lane open is 0.76 cfs, therefore, drainage will function properly if we construct the small valley gutter section described above and illustrated on the following sketch.

We hope this is an adequate compromise that will create the plaza effect that the designers and planners set out to achieve as well as addressing the safety concerns of public works. As you know this area is scheduled for paving soon, therefore we would appreciate you efforts in expediting the review of the proposed revisions.

\\HZDALLA\$1\DI\$K1\proj\01201302\10\mm033198.doc

Please call if you have any questions or need additional information.

Sincerely,

HUITT-ZOLLARS, INC.

and E. Meyers David E. Meyers, P.E.

Cc: Mike Robbins - Post Apartment Homes, L.P.

\VHZDALLAS1\DISK1\proj\01201302\10\mm033198.doc





:

Huitt-Zollars, Inc. / 3131 McKinney Avenue / Suite 600 / LB 105 / Dallas, Texas 75204-2489 / 214/871-3311 / FAX 214/871-0757

HUITT-ZOLIARS

February 16, 1998

Mr. Michael E. Murphy, P.E. Assistant Director of Public Works Town of Addison P.O. Box 9010 Addison, TX 75001-9010

RE: Addison Circle Phase II Public Infrastructure HZI Project No. 01-2013-10

Dear Mr. Murphy:

As discussed and coordinated in an on-site meeting on February 6, 1998, the location of Lone Star Gas within the public right-of way is being revised as follows.

• Quorum Drive:

34 feet east of centerline of street, under new parallel parking.

- Addison Circle from Lewis to 240 feet east of Spectrum: 2 feet south of north curb on east bound lane.
- Addison Circle from 240 feet east of Spectrum to Dallas Parkway: 16 feet south of centerline of street.
- Morris Avenue:
 8 feet north of centerline of street.
- Mildred Place:
 9 feet east of centerline of street.
 Lewis Place:

9 feet west of centerline of street

• McEntire Place: 4 feet south of centerline of street.

We have enclosed copies of the marked up revisions which are being used by Huitt-Zollars for construction staking. We will reissue sheets P3 and P4 from the construction set in the near future.

.

Please call if you have any questions or need additional information.

Sincerely,

HUITT-ZOLLARS, INC.

and E. Muyos

David E. Meyers, P.E. Project Manager



I:\proj\01201302\10\mm021698.doc





		RECEIVED MAY 2 1
Halt Ze lar	. Inc./3131 Mchanney Avenue / Suite 800 / 1,8-105 / Datjas, Texas 75(2)	#-?40972147071 (31177 (A) 214/071 (3757
	MEMORANDUM	
DATE:	May 21, 1998	
DATE: RE:	May 21, 1998 Addison Circle Phase II	
DATE: RE:	May 21, 1998 Addison Circle Phase II HZ Proj. No. 01-2013-10	
DATE: RE: FROM:	May 21, 1998 Addison Circle Phase II HZ Proj. No. 01-2013-10 David Meyers, Huitt-Zollars, Inc. MM	

LONSTRUCTION

: 5-21-98 ; 1:58PM ; HUITT-ZOLLARS, INC.

972 866 6695:# 1/ 2

2

200

I was informed yesterday that the Town of Addison wants to have 2 feet from the edge of the manhole to back of curb at the City of Dallas metering location near the Tollway service road. The revised taper, stations and offsets are noted on the following drawing (Sheet P12). The inlet bottoms will remain as poured which results in a slightly larger throat for the inlet. Please forward this information to Bowman and the Town of Addison.

Please call if you need additional information.

618

SENT BY: XEROX 7033

Addison

iMa

w11273ALLAS1\D188Clymp\01201302\\0MM(k952198-2.mcm.doc

Online Fort Worth Fill Quality (Place / Photolocy Tustin / Unitario / Albuquerave



Huitt-Zollars, Inc. / 3131 McKinney Avenue / Suite 600 / LB 105 / Oallas, Texas 75204-2489 / 214/871-3311 / FAX 214/871-0757

HUITT-ZOLIARS

February 2, 1998

Ms. Carmen Moran Director of Planning and Community Development Town of Addison 5300 Beltline Road P.O. Box 144 Addison, Texas 75001

RE: Addison Circle Modern Round-about H-Z Proj. No. 01-2013-02

Dear Carmen,

We have reviewed the grading study cross-section of the rond-point (round-about) art piece dated January 26, 1998 sent to you by MVVA, Inc., a copy of which is attached hereto. The section indicates an 18-inch high "curb" or landscape wall encircling the art piece eight feet behind the existing 12-inch high vehicular curb on the inside circle of the round-about. As the engineering firm responsible for the design of the round-about, you have asked us to comment on the potential impact of this wall relative to traffic safety.

There are two potential issues with the introduction of this wall: the ability to see over it and the possibility of a vehicle striking it.

The generally accepted convention in urban traffic safety is that objects within a visibility zone should be no higher than 30 inches, usually measured above the adjacent curb. The recommended visibility zone for this round-about is 32 feet inside the inner curb. The wall is only eight feet inside the curb and is therefore within the zone. Since the wall is in addition to the existing 12-inch curb, their combined height is 24 inches above a normal 6-inch curb. There will also be a cross-slope of one to two inches within their 8 foot separation. Therefore, as long as no landscaping other than closely clipped groundcover is planted atop the wall, it will be under the 30-inch threshold and should not present a visibility obstruction. (I note, however, that the proposed grading near the base of the art piece, which raises the ground elevation relative to the curb, does occur within the 32-foot visibility zone. This may not be a problem because of the cross-fall on the circle, but some additional review may is warranted.)

The implied purpose of the wall is as a barrier to deter vehicles from striking the art piece in the center of the round-about. This presents a complex set of issues because the wall is itself a fixed object that, like a bridge parapet adjacent to a highway, might dictate the need for another mechanism to protect motorists from striking it. "Barrier warrants are based on the premise that a traffic barrier should be installed only if it reduces the severity of potential accidents. That is, if the consequences of a vehicle striking a fixed object or running off the road are believed to be

.....

I:\Proj\01201302\CM-TOA020298

more serious than hitting a traffic barrier, the barrier is considered warranted." (See attached excerpt from *Roadside Design Guide*).

This brings about a highly subjective judgement. I do not know enough about the art piece to say, in a definite way, that the consequences of a vehicle striking it would be greater than striking the wall. They would certainly be more costly because repairing the art piece will be more costly than repairing the wall. However, we cannot put a price on human life and striking either object could result in a traffic fatality. The question really becomes whether either object is <u>likely</u> to be stricken such that a fatality might result. The greatest likelihood of a fatality is in a head-on collision.

The art piece is a series of vertical objects arranged such that a direct impact with any of the individual elements would be possible from a variety of directions. The wall, on the other hand, must be hit by a vehicle traveling radial to the circle in order for a direct impact to occur. Given the geometry of the roundabout, especially on its approach legs, it is apparent that a radial impact would be very unlikely. Vehicles are directed tangentially around the circle by the curbs in the approach and the likely collision with the wall is therefore also tangential. This is most likely to occur when a vehicle entering the circle fails to yield and forces a vehicle already in the circle into the central island. However, if the wall were not there, a vehicle forced into the central island could strike one of the vertical elements of the art piece, radial to that element, in a direct impact. This is not to say that someone couldn't come flying down Quorum Drive at 100 mph and jump all curbs for a direct thit on either the wall or the art-piece. It could happen, but is far less likely than the other scenario and much too extreme a basis for a reasonable design.

In conclusion, the art piece and the wall are both barriers that, if struck by a vehicle under certain circumstances, could contribute to a traffic fatality. The art piece is to be placed in such a manner that it is set back significantly from the roadway in the center of the island. The round-about is designed to direct vehicles tangentially around the center island at slow speeds. Due to the basic design of the round-about and the presence of the 12-inch curb, the likelihood of striking the wall head on is negligible. The addition of the wall does, however, reduce the likelihood of striking a portion of the art-piece head-on. Therefore, it is our opinion that the addition of the wall does not present a safety hazard, and in fact, may make the round-about more safe under certain circumstances.

Please let me know if we can be of any further assistance in this matter.

Sincerely,

HUITT-ZOLLARS, I

Andrew C. Oakley, P.H. 55860 Senior Vice President

NDRFW

Cc: John Baumgartner, Town of Addison

CHAPTER 10: ROADSIDE SAFETY IN URBAN AND/OR RESTRICTED ENVIRONMENTS

10.0 OVERVIEW

Generally, the principals and guidelines for roadside design presented in all of the previous chapters of this Guide discuss many roadside safety considerations for rural highways, where vehicle speeds are on the high side (that is, approaching 80 km/h, and greater) and the highway is operating under free-flow conditions. This chapter is intended to present the designer with considerations to help enhance safery in urban and urban-like areas and restricted or special situations. When discussed in this chapter, "urban" and "urban-like" refer to highways or streets where the following type conditions may be found: lower speeds; dense abutting development; limited right-of-way; closely spaced intersections and access to properties; high traffic volumes; and the presence of special users including masstransit vehicles, delivery trucks, bicycles, and pedestrians. These and other factors influence the design and operation of highways in these areas. Restricted environments are sections or segments along roads and streets where there is limited right-of-way, where pedestrians are present in close proximity to the street, and where there is the presence of facilities needing special consideration - such as playgrounds or schools, and/or varying vehicle speeds and volumes. These restricted areas are not limited to urban environments, as they may also be found in rural and suburban settings.

Often there is no clear demarcation between rural and urban conditions. The transition area between the two has been referred to as "suburban." This is the stretch of roadway where traffic is leaving a rural type setting and entering an urban type setting. It is the vicinity where travel speeds are reducing but in many cases tend to remain on the high side, where abutting property access points and intersections are becoming more frequent, and where bicycle and pedestrian activity are on the increase. Of course, when leaving the urban-like area, these conditions would be diminishing and operating speeds would generally be on the increase.

While not so much the case in rural areas, the areas immediately bordering urban roads and streets are likely places for pedestrian activities, along with close utility locations and landscaping. Roadside safety for **both** the motorists and pedestrians needs to be kept in mind. Protection for pedestrians from possible errant vehicles may be prudent. There may be situations whereby the design should include some sort of fencing or barrier to help keep pedestrians or objects from entering onto the roadway or street.

It is mentioned under Section 2.1.2, the highway engineer has a significant degree of control over roadside geometry and appurtenances. This statement is more correct for rural conditions, and especially so for new rural highways. However, in many urban type or restricted conditions, the roadside environment (houses, businesses, trees, utility poles, signals, walkways, etc.) is already established to a high degree, and thus, the designer has the challenge of providing roadside safety given the many pre-existing constraints.

In the usual case, existing road and street traffic volumes increase with the passage of time. This results in decisions regarding additional lanes to provide additional roadway capacity. Designers must be cognizant that this will increase the potential for vehicle interaction with pedestrians and bicyclists, etc., that are using the space immediately adjacent to the roadway facility. Appropriate measures should be considered to provide a desirable (maximum) level of safety. A safe, efficient, and economical design is the goal.

The various features (for example: benches, trash receptacles, bike racks, utility supports, etc.) that are

associated with the urban roadsides, that accommodate pedestrians and bicyclists, may be undesirable from the errant motorist's point of view. Ideally, appurtenances should not be located where they can be hit by an errant vehicle. In cases where they are, they should be of a yielding nature in order to minimize damage to the striking vehicle and its occupants. It is not recommended that traditional breakaway/frangible devices be used where they are likely to fall on or become projectiles which could strike pedestrians in the area. All situations need individual analysis to determine the appropriate treatment, based on the relative risks to motorists and pedestrians/bicyclists.

10.1 NEED FOR INDIVIDUAL STUDY OF SITES

The clear roadside concept is still the goal of the designer; however, this is often not attainable and compromises may be necessary. The design options for treatment of fixed objects should be considered in each case; they are:

- Remove the obstacle or redesign it so it can be safely traversed.
- Relocate the obstacle to a point where it is less likely to be struck.
- Reduce impact severity by using an appropriate breakaway device.
- Redirect a vehicle by shielding the obstacle with a longitudinal traffic barrier and/or impact attenuator.
- Delineate the obstacle if the above alternatives are not appropriate.

Engineering judgement will play an important part in the determination of improvements which can reasonably be made within the constraints of the urban roadside. To a greater extent than when designing for roadside safety for high-speed rural highways, each site in a restricted road environment should be individually studied. Since the conditions and concerns may vary greatly from site to site, using standard approaches may not be the most effective process. Designers should consider many alternatives to achieve a safe and balanced design. A key consideration is the presence or absence of other close-proximity objects, and the repetitive nature of such. A very important consideration is the driver's awareness of such constraints. In other words, how does the road environment "look" to the driver? It can be assumed that when drivers "feel" they have entered a more restrictive environment, they match it with a corresponding reduction in operating speed and/or

increased attention to the driving task. A similar analysis should consider the perception of risk from the viewpointof the adjacent pedestrians and bicycle users. The designer needs to look for design methods/techniques that can help "protect" against and minimize the risks. Maintenance considerations must be addressed for whatever action is to be implemented.

10.2 DESIGN SPEED FOR ROADSIDE FEATURES IN URBAN AND RESTRICTED AREAS

The selection of a design speed for safety appurtenances and other roadside features on some urban and suburban roads and streets may differ from highspeed rural highways. It has been observed that, in general, on roadways where the design speed is 110 km/h and greater, the average vehicle operating speeds were less than the design speed. However, on low-speed roadways (design speed 70 km/h or less), the average operating speeds were greater than the design speed. Further, AASHTO's A Policy on Geometric Design of Highways and Streets states, "A design that satisfies the requirements for average running speed at low volume is adequate for traffic using the highway when the volumes are higher and the speeds are lower. ... For this reason low-volume conditions control certain highway elements, such as lane and shoulder widths, treatment of intersection curves, and speed-change lanes." This same rationale holds true for the design of safety appurtenances and features for urban/suburban roads and streets.

On urban and suburban roads, operating speeds have greater variation by time of day than rural roads. During free-flow conditions, and especially during late night periods, speeds are much higher than during the heavy traffic flow periods, often even beyond the speed limit. With higher speeds come more severe accidents, as indicated by the data shown in Table 10-1. During the lower volume and higher speed period of 7 p.m. to 7 a.m., there is a greater percentage of injury and fatal accidents than during the other half of the day. While other factors may contribute to this higher percentage, higher speeds and greater speed variance under freeflow conditions is likely to be a significant contributing factor. Consequently, roadside features should be designed for the higher operating speeds that occur during free-flow conditions. This may mean that the design speed for roadside features may be higher than for the roadway proper. A speed study may be appropriate to determine the speed to be used for roadside design at locations where these conditions apply.

Time Period	Property Damage Only Accidents	Possible Injury and Non-incapacitating Injury Accidents	Incapacitating Injury and Fatal Accidents	Total	
7 p.m 7 a.m.	34.6	13.6	6.8	55.0	
7 a.m 7 p.m.	32.3	8.8 i	3.9	45.0	
		i i		_100.0	

TABLE 10.1 Percentage of Single Vehicle Run-off Road Accidents by Severity and Time Period for Urban Principal and Minor Arterials in Illinois

10.3 ROADSIDE BARRIERS IN URBAN AND RESTRICTED AREAS

A roadside barrier is a longitudinal barrier used to shield motorists from natural or synthetic obstacles located along either side of a roadway. The primary purpose of all roadside barriers is to prevent a vehicle from leaving the roadway and striking a fixed object or roadside feature that is considered more objectionable than the barrier itself. This is accomplished by containing and redirecting the impacting vehicle. In urban settings, barriers are often used to separate bystanders, pedestrians, and bicyclists from vehicular traffic.

Refer to Chapter 5 for a discussion of performance, structural, and safety characteristics of standard roadside barriers.

An untreated end of a roadside barrier is not desirable since if hit it may penetrate the passenger compartment or stop the vehicle too abruptly. A crashworthy end treatment is therefore considered essential if the barrier terminates within the clear zone or in an area where it is likely to be hit head-on by an errant motorist. The selection of the proper treatment should be in accord with the proposed test levels, warrants, and availability of maintenance. To be crashworthy, the end treatment should not spear, vault, or roll a vehicle for head-on or angled impacts.

Street intersections and driveways complicate the selection and use of end treatments. A major factor in selecting and locating end treatments is obtaining the necessary corner sight distance at these locations. A subjective analysis of the installation site should be done to determine the likelihood and consequences of a vehicle striking an unprotected barrier end versus the need to achieve acceptable corner sight distance.

Aesthetic concerns are not usually a significant factor in the selection of a roadside barrier except in environmentally sensitive locations such as recreational areas, parks, or some urban environments. In these instances, a naturallooking barrier that blends in with its surroundings is often selected. It is important that the systems used be crashworthy as well as visually acceptable to the highway agency. Having decided that a roadside barrier is warranted at a given location and having selected the type of barrier to be used, the designer must specify the exact layout required. The major factors that must be considered include the following:

- Lateral offset from the edge of pavement and deflection distance of the barrier
- Terrain effects
- Flare rate
- Length of need
- Corner sight distance

Generally, a roadside barrier should be placed as far from the traveled way as conditions permit. Such placement gives an errant motorist the best chance of regaining control of the vehicle without striking the barrier. It also provides better sight distance, particularly at nearby intersections.

It is desirable that a uniform clearance be provided between traffic and roadside features such as bridge railings, retaining walls, roadside barriers, utility poles, and trees, particularly in urban areas where there is a preponderance of these elements. The placement of roadside barriers is covered in Chapter 5.

10.3.1 Barrier Warrants

Barrier warrants are based on the premise that a traffic barrier should be installed only if it reduces the severity of potential accidents. It is important to note that the probability or frequency of run-off-the-road accidents is not directly related to the severity of potential accidents.

Typically, barrier warrants have been based on a subjective analysis of certain roadside elements or conditions. If the consequences of a vehicle striking a fixed object or running off the road are believed to be more serious than hitting a traffic barrier, then the barrier is considered warranted. While this approach can be used often, there are instances where it is not immediately obvious whether the barrier or the unshielded condition presents the greater risk. Appendix A presents an analysis procedure that can be used to compare several alternative safety treatments and provides guidance to the designer.

Highway conditions that warrant shielding by a roadside barrier can be placed in one of two basic categories: embankments or roadside obstacles. Warrants for the first category are found in previous chapters. Low profile barriers (600 mm high) for speeds 70 km/h or less have been developed. They shield without obstructing visibility. The presence of pedestrians or other "bystanders" may justify protection from errant vehicular traffic.

10.3.2 Barriers to Protect Adjacent Land Use

In urban and suburban areas, more consideration should be given to protecting innocent bystanders, who are using adjoining properties, from risks imposed upon them by errant vehicles. Schools, playgrounds, and parks located on the outside of sharp curves or across T-intersections are examples of where barrier systems may be appropriate. At these locations, the probability of a vehicle leaving the roadway and striking a person or persons in the area is greater than on tangent stretches of roadway.

Barriers intended to protect adjacent land use must prevent an errant vehicle from entering a specific area. A barrier that is not structurally adequate may be less desirable for the people it was intended to protect than having no barrier at all. Flying debris resulting from the impact of a vehicle into a deficient barrier can injure people in the area. Standard longitudinal barrier designs may need to be modified, depending on the community interests and the site conditions.

Consideration should also be given to installing a barrier to shield businesses and/or residences which are near the right-of-way, particularly at locations having a history of run-off-the-road accidents.

10.3.3 Warrants for Pedestrian and Bicyclist Barriers

Pedestrians and bicyclists are another area of concern to highway engineers. The most desirable solution to this problem is to separate them from vehicular traffic. Since this solution is not always practical, alternate means of protecting them is sometimes necessary. As in the case of bystander warrants, there are no objective criteria to draw on for pedestrian and bicyclist barrier warrants. On lowspeed streets, a barrier curb will usually suffice to delineate/separate pedestrians and cyclists from vehicular traffic. However, at speeds significantly over 70 km/h, a vehicle may mount the curb at relatively flat approach angles. Hence, when sidewalks or bicycle paths are adjacent to the traveled way of high-speed facilities, some provision may need to be made for the safety of pedestrians and bicyclists. For additional information concerning bicycles, the reader is referred to AASHTO's *Guide for the Development of Bicycle Facilities*.

10.3.4 Pedestrian Restraint Systems

Accidents involving pedestrians account for almost one out of every five traffic fatalities. Pedestrian accidents in some cities have accounted for as many as one-half of the traffic fatalities.

A large percentage (almost 40 percent) of pedestrian deaths occur while crossing streets between intersections; the injury rate shows the same trend. A pedestrian barrier prevents these accidents. Fences or similar devices that separate pedestrian and vehicular traffic have been used successfully to channel pedestrians to safe crossing locations.

Median pedestrian barriers can significantly reduce the number of midblock crossings. Median barriers are frequently chain-link fences located along a median, which prevent pedestrians from crossing at non-intersection locations. They can be installed exclusively as pedestrian barriers or be incorporated with vehicle-separating median barriers.

Sidewalk barriers are located along or near the edge of a sidewalk to channel pedestrians to a crosswalk or gradeseparated facility or to impede their crossing at undesirable locations.

Other barrier uses may be outside school entrances and playgrounds. Often it is advisable to contain pedestrians at public transportation stops in order to prevent pedestrians from encroaching onto the roadway.

Common construction materials include chain-link fencing, pipe and chain/cable, planters or other sidewalk furniture, and hedges. Planters are not recommended if they would be an additional fixed object in an otherwise clear zone. Planters are not recommended on narrow sidewalks, where they may impede pedestrian circulation.

Roadside pedestrian barriers are generally high chain-link fences located alongside a highway or freeway to prevent pedestrians from crossing the road. Pedestrian barriers should be crashworthy designs, for example, eliminating the top traverse pipe cross bracing for chain-link fence.

Useful guidance may be found in the latest version of the Uniform Federal Accessibility Standards. Additional guidance may also be found in the British Standard Specification for Pedestrian Restraint Systems. -----

10.4 MEDIAN BARRIERS IN URBAN AREAS

A median barrier is a longitudinal barrier most commonly used to separate opposing traffic on a divided highway. It is also used along heavily traveled roadways to separate through traffic from local traffic or to separate special use lanes from other highway users. By definition, any longitudinal barrier placed on the left side of a divided roadway may be considered a median barrier. For median barriers on high-speed, controlled-access roadways which have relatively flat and traversable medians, refer to Chapter 6.

The use of standard highway median barriers on urban facilities with a design speed of 70 km/h or less with street intersections, regardless of access control, generally is not warranted. Alternate methods of separating opposing traffic are encouraged, such as the use of medians (in some cases raised medians). Flush medians are preferred over raised medians on highways with design speeds of 60 km/h or more. Raised medians can cause errant vehicles to vault.

10.5 BRIDGE RAILINGS

The local variables regarding the placement of urban guardrail, bridge railing, and other barriers become more challenging. The primary reasons are the need to match intersecting streets, provide access to properties, and to maintain access for pedestrians including the physically challenged.

As detailed in Chapter 7, appropriate bridge railings need to be selected by considering roadway design, traffic volumes, percent of heavy vehicles in the traffic stream, and the volume of pedestrian traffic. The performance requirements of bridge railings for urban areas are no different than any other highway system. However, bridges carrying low traffic volumes at greatly reduced speeds may not need bridge railings designed to the same standard as railings used on high-speed, high-volume facilities. The railing shall have adequate strength to prevent penetration by passenger vehicles while the transition rail section approaching the bridge should be considered with the same selection considerations discussed in previous sections. Transitions which meet performance levels one and two in accordance with NCHRP 350 are generally acceptable for cases with low roadway speeds. The bridge rail and transition section, nevertheless, must function effectively for the location and conditions selected. Standardization of urban bridge rail systems improves availability of replacement parts for maintenance departments.

Highway structures, regardless of location and traffic volume, normally warrant rigid railing. A rigid bridge railing requires an approach guardrail and the transition section. When a bridge also serves pedestrians, a barrier to shield them from vehicular traffic may be warranted. Placement of the bridge railing between traffic and the sidewalk affords maximum pedestrian protection. A pedestrian railing would then be needed at the outer edge of the bridge structure. The need for a bridge railing adjacent to the pedestrian walkway should be based upon the volume of traffic and the speed of the roadway traffic. Other considerations are the number of pedestrians crossing the bridge, the accident statistics (if available), and the conditions on either end of the structure. This type of treatment, on the other hand, may create a problem unless the bridge railing is terminated in an acceptable manner. Flaring the end section away from the roadway is often not practical because it would encroach upon the sidewalk, requiring the walkway to meander around the transition section and terminal unit.

In some instances, a crash cushion or metal beam barrier terminal can be used to an advantage; however, the presence of a raised curb may adversely affect the performance of this type of end treatment. In many low-speed situations, a concrete tapered end section parallel to the roadway may be the best compromise. The taper of the end section should be of sufficient length from the end of the bridge so that an impacting vehicle is ramped on and over the sloped end treatment before reaching the outside edge of the structure, yet not extend so far as to intrude on the sight distance of adjacent intersection streets just off the end of the bridge (Figure 7.1). Recommended minimum taper length is 6 meters, with 10 to 13 meters desirable.

Retrofitting existing bridge railings is a challenge. Typically bridges designed to AASHO Specifications prior to 1964 may have deficient railings (based on current criteria). If the adequacy of a railing appears questionable, further evaluation should be made to ensure the design meets the current specifications. In many older railing systems the presence of curbs defines the walkway between the driving lane and the bridge railing. This curb may cause an impacting vehicle to go over the railing or to strike it from an unstable position causing possible roll over.

While some retrofit designs may not bring a bridge railing not meeting current guidelines to full AASHTO standards, significant improvements can nevertheless be obtained. Chapter 7 outlines a number of retrofit concepts that can be adopted to different types of deficient railings. The metal post and beam retrofit functions well as a traffic barrier separating motor vehicles from pedestrians using an adjacent sidewalk crossing the bridge (Figure 7.9). In most cases, the metal post and beam system allows the existing bridge railing on a wide raised walkway to be used or converted to a pedestrian rail. A Self-Restoring Bridge Rail (SERB) retrofit provides containment of large vehicles where serious consideration for this condition is needed (Figure 7.11). Other retrofit means are also available and should be reviewed to determine its appropriateness for the conditions that exist.

(For guidance information concerning "overpass structures" on bridges, the reader is referred to AASHTO's A Guide for Protective Screening of Overpass Structures.)

10.6 CRASH CUSHIONS

Crash cushions are ideally suited for use at many urban locations when fixed objects cannot be removed, relocated, or made breakaway and cannot be adequately shielded by a longitudinal barrier. In urban situations, the increase in roadway maintenance mileage, the tight rightof-way constraints, and varying traffic flow conditions creates situations that limit available options for removing or relocating fixed objects. Use of crash cushions as opposed to longitudinal barriers become more appropriate to shield fixed objects, such as at exit ramp gores, ends of median barriers, bridge piers and abutments, to name only a few.

The availability of adequate width for the placement of crash cushions is often more restricted in urban areas, creating narrow placement areas. The options for selection of a crash cushion can be limited, due to the narrow site characteristics. However, a number of crash cushions and impact attenuation systems are available for narrow width conditions. The Hi-Dro Sandwich system can be ordered in a minimum width of 900 mm. The Hi-Dro Cell Clusters provide good low-speed attenuation at gore areas, bridge piers or abutments; and at traffic control devices that require narrow width systems. The Guard Rail Energy Absorbing Terminal (G-R-E-A-T) is provided in standard widths of 610 mm, 760 mm, and 910 mm. These systems and others as outlined in Chapter 8 should be reviewed to determine the effectiveness of the system for the proposed site location.

If crash cushions are located in areas accessible to pedestrians, vandalism can be a problem, particularly with Hi-Dro Sandwich or Hi-Dro Cell Cluster units, where damage to the individual tubes may go unnoticed without careful inspection. Curbs can also reduce the effectiveness of the crash cushion. Curbs should not be built where crash cushions are installed. Where necessary for drainage, an existing curb no higher than 100 mm could be considered acceptable and left in place, unless it has contributed to poor performance in the past.

Crash cushions are not intended to reduce accidents but rather lessen the severity of the impact. If a particular crash cushion is struck frequently it is important to determine why the collisions are occurring. Improved use of signs, pavement markings, delineation, reflectors or luminaires may help to reduce the number of occurrences.

10.7 CURBS

Curbed sections are generally restricted to speeds of 70 km/h or less on roadways in urban or highly developed areas. Some things that need to be considered are: deline-

ation of the pavement edge, delineation of pedestrian walkways, control of access points, retention of water on the roadway, and vaulting of vehicles.

When a vehicle strikes a curb, the trajectory of that vehicle depends upon several variables: the size and suspension characteristics of the vehicle, its impact speed and angle, and the height and shape of the curb itself. Crash tests have shown that the use of guardrail with 150-mm curb where high-speed, high-angle impacts are likely should not be considered. Where curb is needed for drainage, the use of a curb no higher than 100 mm is satisfactory. On low-speed facilities, a vaulting potential still exists but, since the risk of such an occurrence is lessened, the use of 150-mm curb in combination with guardrail can be tolerated. Each situation should be considered individually taking into account anticipated speeds and consequences of vehicular penetration of the barrier.

The common practice in urban settings is to utilize curbs adjacent to the highway shoulders in order to provide separation of pedestrians from the traffic flow. In lowspeed situations, a vertical face curb may provide marginal protection for pedestrians and acts to prevent the mingling of vehicular traffic flow and pedestrians. Curbs alone may not always be considered as adequate protection for pedestrians on adjacent sidewalks, or for shielding utility poles. In some cases, other measures may need to be considered. Realistically, a non-mountable curb has only limited redirectional capabilities, and only at low speeds.

The 0.5-m minimum clear zone behind a curb should always be exceeded if room permits. Designers should strive for a greater clear zone — one more appropriate for the off-peak operating speeds. At the higher speed end of the suburban area or high-speed urban facilities, consideration should be given for providing a shoulder and offsetting any curbing to the back of the shoulder. This shoulder can be eliminated, if necessary, further into the suburban area, where off-peak speeds are lower. The shoulders may be used to accommodate bicyclists and even pedestrians when sidewalks are not warranted.

Curb/barrier combinations should be crash tested if possible to quantify expected barrier performance under typical impact conditions, if extensive use of the combination is planned.

Section 3.4.1 provides additional guidance for the use of curbs.

10.8 DRAINAGE

Because speeds are generally lower, ditches are less of a safety problem to the errant motorist. Where practical, a closed drainage system should be considered. Curbs and drop inlets are common drainage elements in these cases. Drainage inlets, grates, etc., should be placed flush with the ground surface and must be capable of supporting vehicle wheel loads; slots should be spaced and oriented so they will not be an obstacle to pedestrians or bicyclists.

Even though drainage ditches may be located outside the nominal clear zones in suburban areas, there may be a likelihood that errant vehicles which reach the ditch could strike parallel culvert ends at driveways or intersecting roads. Traversable designs should be considered at these locations. Section 3.4.3.2 provides information on traversable designs.

10.9 LANDSCAPING

Along most urban streets some type of landscaping exists. Trees, shrubs, lawns, decorative rock, and other materials are used to provide a pleasing setting for drivers, pedestrians, bicyclists, and abutting land owners.

The designer should always be consulted in the decisions regarding landscaping, particularly as they relate to sight distance and possible future lane needs. Considerations in design of landscaping include:

- The mature size of trees and shrubs, and how this will affect safety, visibility, and maintenance cost.
- Sufficient border area to accommodate the type of landscaping planned. If parking is allowed along the curb, will the landscaping allow access to parked vehicles?
- Design landscaping with possible future changes in roadway cross section in mind. For example, the addition of a second left-turn lane at major intersections by taking approximately 3 additional meters from the median island is becoming a normal practice. Landscaping in the affected area should be minimal or should not be included in the plan.

In general, in urban areas with lower travel speeds, large trees should be kept at least 2 to 3 meters from the edge of the traveled way, certainly outside of the clear zone.

Visibility restrictions resulting from landscaping are of principal concern to the designer. Points which must be considered include:

• Border area landscaping should allow full visibility at driveways for drivers and pedestrians.

- A clear vision space from 1 to 3 meters above grade is desirable along all streets and at all intersections. This allows drivers in cars, trucks, and buses to have good sight distance. Many cities have ordinances for sight restrictions at corners which incorporate this "clear space" idea.
- Landscaping very small islands should be avoided, to reduce maintenance needs.
- Large trees or rocks should not be used at decision points (e.g., gore areas, island noses) to "protect" poles and other appurtenances. Rather, each of the design options (in the order listed) stated in Section 10.1 should be considered to improve safety.

With respect to pedestrians, it is desirable to have a grass strip separating the sidewalk from the curb, thus further separating the pedestrian from vehicular traffic.

10.10 WORK ZONES

Construction work zones in urban areas have varying conditions of traffic control and work zone protection needs. Conditions can vary from low-speed, low-volume urban streets to highway construction zones in high-volume arterial and interstate locations. The type of traffic control under consideration needs to be reviewed for the site conditions, operating speeds, and traffic flows within the construction zone. The *Manual on Uniform Traffic Control Devices* (MUTCD) establishes the principles to be observed in traffic control, design, installation, and maintenance of traffic control devices in work zones.

Chapter 9 details a number of available traffic barriers and traffic control devices. Effective use and implementation of these barriers and devices in urban conditions remains extremely important and must be given full consideration on an individual project basis.

REFERENCE:

 British Standards Institute. British Standard Specification for Pedestrian Restraint Systems. 2 Park Street, London W1A2BS, United Kingdom... .

.

•.

· ·



HUITT-ZOLIARS

	<u>S - Fort Worth - Houston - El Paso - F</u> ACS	Phoenix Seattle – Tacoma - Tustin - SIMILE TRANSMITTAL	-Denver - Ontario - A	<u>Ilbuqu</u> erque
Date:	4/25/00	Fax No:	972-450-2837	
H-Z :Proj. No.	: 01-2599-01	No. of Pages:	· Chast)	5
ТО: <u>М</u>	ike Murphy			
<u></u>	own of Addison			
URGENT	FOR YOUR REVIEW	PLEASE CALL	UPON RECEIPT	ORIGINAL TO FOLLOW
NOTES/COM	MENTS:			
		······································	······	
FROM:	David E. Meyers, P.E.	•		
SENT BY:	Eunice	TIME:	DATE:	4/25/00
	If you have any problems re	eceiving this fax, please call us	at (214)871-3311	
<u>3131 M</u>	AcKinney Avenue - Suite 600	Dallas, Texas 75204 - (214)873	<u> 1-3311 - Fax (214)</u>	871-0757

Huitt-Zollars, Inc. / 3131 McKinnoy Avenue / Suite 600 / LB 105 / Dallae, Toxas 75204-2469 / 214/97 (-3311 / FAX 214/97 I-0757

April 24, 2000

Mr. Tom Sterling Texas Department of Licensing and Regulation Architectural Barriers P.O. Box 12157 Austin, TX 78711

Rc: Addisou Circle Phase 2B Public Infrastructure HZI Project No. 01-2599-01 TDLR Proj. No. EABPRJ99009188

Dear Mr. Sterling,

We are herewith transmitting a variance request in response to your review comments requiring accessible parallel parking on the public streets.

Enclosed please find a sketch illustrating the width of public right-of-way for this project. Given this width and district guidelines for this development, there is not sufficient space to provide the additional 6 feet required for a safe accessible parallel space. The streets in question are public residential streets adjacent to urban style multi-family apartment buildings. There is no public use or retail space in this development. Accessible spaces for the apartment buildings are being provided in a multi-level parking garage structure. The residential streets are no wider or narrower than a typical residential street in a neighborhood with the exception of the streetscape and sidewalk zone.

We believe that a variance is warranted in this condition given that no public use or retail space is adjacent to the residential streets in question.

Thank you for your consideration and please call if you have any questions.

Sincerely,

HUTT-ZOLLARS, INC.

aund E. Meyers

David E. Meycrs, P.E. Associate

DEM/em

Cc: Cindy Harris – Post Properties Mike Robbins – Post Properties Mike Murphy – Town of Addison

I:\proj\01999901\DAVIDM01259901\TS-TD1_ACPh2B.042400.doc

SENT DI AERUA (UJJ

.

7 4-25- U 7 9FUUAM 7 HUTTT-ZULLARS, INC.→

3/245U283/;# 3/ 5

TEXAS DEPARTMENT OF LICENSING AND REGULATION

ARCHITECTURAL BARRIERS

APPLICATION FOR VARIANCE

In accordance with Rule 68.31, I hereby apply for a variance or waiver of a standard or specification required for compliance with the Architectural Barriers Act, Article 9102, T.C.S. as they apply to the facility described on the attached Project Registration Form on th grounds that literal compliance with the Department's regulations is impracticable in this case.

FORM MUST BE COMPLETED IN FULL

PLEASE PRINT OR TYPE

1. Project Name				
Addison Circl	<u>e Phase 28 P</u>	<u>ublic Infrastruct</u>	ture	
Building/Facility Name				
Addison Circi	e			
Location/Address		City/Zip		Tel
Morris Ave/Ar	<u>tist Way</u>	Addison 75	5001	972-450-2878
2. Owner				
Addison				, ·
Mailing Address		City/Zip		Tel.
P.O. Box 9010		Áddison 75	5001 _	972-450-2878
3 is building/facility being	considered for a sta		If yes ideal	in the state approx and
Include the name and add	rees of the contact n	elease: <u>ken X</u> lio	n yea, iqeni	ing the state agency and .
	ioss of the contract h			
				Tel
· · ·		·		
3a. Has bidding or award	of contract occurred?	<u>x_yes</u> no		
		·····		
4. Total square footoge of	building/faciliby	Der Elen		
Total square lootage of	acinging/idenity		<u> </u>	
5. Check the work perform	ed or to be performe	ed:		
<u>x</u> New	v Construction,	Addition,	Renovation, Mo	odification, Alterstion,
Cha	inge in Occupancy		_	
				the second se
6. State the section of the	Department of Licen	sing and Regulation, Texas	Accessibility St	andards for which a variance is being
requested: (applications s	hall be submitted for	each element/section)	<u>.</u>	
	•			
Section #	Location & Desci	ription of Nonconforming Co	ndition	
<u>4.6</u> .2	<u>Public res</u>	<u>idential streets</u>	<u>(37'b-b)</u>	<u>with permit parallel</u>
	parking or	<u>both sides.</u>		
7. Is the building historical	ly significant? If no.	ao ta #8.		
7a, if yes, ide	tify designation and	indicate date of listing:		
	,	-		
7b. If you che	cked any of the abov	e, vou must provide a deterr	nination of effec	zt letter
from the Texa	s Historical Commis	sion, 1511 N. Colorado St.,	Austin, Texas 7	8701
9 State in detail the reason		tib the standard is impraction	cable include th	a cost pacessary to achieve
o. State in detail the reaso	na wny compliance v Mare I lee edditiona	van me stangaru is impravad Lebeste Krieserettin		ie coat mecessary to admete
	iuons, Use addiuona	i sneets il necessary.		I.I. Are- width as
There is not s	UTTICIENT SP	ace to provide	<u>rne paral</u>	Jei parking widda as
described 4.6.	<u>2 F1q 9(a) a</u>	na meet the dist	<u>rict mand</u>	aced requirements for
screet trees a	na wide side	warks, The addi	<u>rional W1</u>	the proving of the
<u>tit within the</u>	<u>given publi</u>	<u>c_right-of-way</u>	Strining	<u>tion for porcord</u>
current width	<u>of 7 feet wo</u>	uld create an un	SATA CUNU	TCTON TOT DETSOUR
entering and e	<u>xiting venic</u>	<u>les. (See enclos</u>	<u>ed sketch</u>	

TOLR FORM 013EAB 10/95

OVER

۰.

•••

9, is a build	ng permit required for this work?yes _xno. if no, go to # 13, 9a. Has a building permit been applied for?yesno. 9b. Has building permit been issued?yesno. 9c. If a building permit has been issued, what date was it issued?	
10. State the	estimated cost of construction as stated on the building permit. N/A	
11. Have an	y other building permits been issued for this building within the past 24 months? yesno. 11a. If yes, state the dates that permits were issued and the estimated cost of construction for each permit	
12. Has a cr If yes, si	ntificate of occupancy been issued for the facility?yeano.	
13. To the b	est of your knowledge, has a complaint ever been filed on this building relative to accessibility? vesno. If yes, state circumstances:	
Explain:	13a. Was the complaint resolved?yesno,	
14. State the Const to be	phase of design or construction of the facility as of the date of this application: ruction of streets and utilities are complete. Sidewalk const igin May 8, 2000.	ruction

PLEASE NOTE: The Department shall decide your application based on information submitted. You should therefore include all relevant information with your application. Drawings and photographs are extremely important.

4/24/00 Date	David E. Meyers, P Name Huitt-Zollars, Inc	.E.		
	Company-Finn 3131 McKinney Ave.	Suite 600		
Owner	Address Dallas	TX	75204	-izenatud
Agent	City Danuel C.M.	State	Zip Code 214-871-3311	
	Signature		Telephone	

IMPORTANT

A \$100 00 PAYMENT MUST ACCOMPANY EACH APPLICATION, MAKE CHECK PAYABLE TO THE TEXAS DEPT. OF LICENSING AND REGULATION AND MAIL TO TOLR, P.O. BOX 12157, AUSTIN, TX, 78711, APPLICATIONS RECEIVED WITHOUT PAYMENT WILL NOT BE PROCESSED.

7 test Parking Zone 11 fost driving lames



(2) - District mandated bldg setbock from public right - of-way.



Project

Mallin an

Task



PUBLIC WORKS DEPARTMENT

(972) 450-2871

Post Office Box 144 Addison, Texas 75001

16801 Westgrove

÷

1.17 1.11.11.11

February 5, 1998

Mr. David Meyers, P.E. Huitt-Zollars, Inc. 3131 McKinney Avenue, Suite 600 Dallas, Texas 75204-2489

Re: Addison Circle Phase II - Paving, Traffic Control Plan

Dear David:

The Town of Addison has reviewed the Traffic Control plan submitted by Bowman Construction Company, Inc. for Addison Circle Phase II - Paving.

This traffic control plan is "approved" based on compliance with the Town of Addison's Ordinance 085-094 regarding construction barricades.

Please contact me if you have any question.

Sincerely,

Mbs.N

Michael E. Murphy, P.E. Assistant Director of Public Works

xc: John Baumgartner, P.E., Director of Public Works

HUITT-ZOLIARS

\$

. •

Dallas • Fort Worth • Houston • El Paso • Phoeniz • Tustin • Ontario • Albuquerque

1 400	IMILE TRANSMITTA	Ĺ
Data: 2/3/98	Fax No.	972-45-2837
H-Z Proj. No. <u>Cl 201316</u>		No. of Pages: E. 3 (Including Cover Sheet)
TO: Bruce Ellis - 972-4	Sa-2817	
Michael Mucony - 97	2-45-2837	
URGENT A For Your Review	Please Call Upon Receipt	🖸 Orig. To Follow By Mail
Re: Addison andre.	亚	
Traffic Control Plan	for your appro	val.
······································	· · · ·	
· · · · · · · · · · · · · · · · · · ·		····
		······
₩*10-		
· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	
		-
and I ament Meyor	4	
and the second s		

•

.

.

.

JIM BOWMAN CONSTRUCTION COMPANY, INC.

10209 Plano Koad, Suite 101

Dallas, lickas 75238

(214) 349-2884

RECEIVED JAN 2 8 1938

Addison Circle - Phase II - Paving

Traffic Control Plan

General Barricade Layout For Temporary Curb Lane Closure (During working hours only - 18 inches of pavement to by removed)

- 1. 2 Signs on median and behind curb "Road Construction Ahead"
- 2. 2 Signs on median and behind curb "Right Lane Closed Ahead" (or left)
- 2 Signs on median and behind curb "Right Lane Ends Merge Left" (or vice-versa)
- Vertical Panels (Alternating with light and without light) spaced at 30-ft intervals for 150 feet closing the curb lane.
- Vertical Panels (alternating lights) at 50-ft or closer intervals along side of work area.

Work areas adjacent to each other will be closed as one work area.

During non - working hours, the signs (except for "Road Construction Ahead") will be removed and the vertical panels pulled back to the edge of removed pavement, thus opening the traffic lane.

One lane of traffic will be open each direction at all times.

An arrow board will be utilized on the Dallas North Tollway Service Road in addition to the above barricades.

conform to the requirements of these Specifications covering the particular Work. Salvaged materials in good condition may be used in rebuilding such structures, provided the materials are thoroughly cleaned before their use.

All private obstructions which are indicated on the Plans to be moved, will be removed and replaced, or moved to new permanent locations by the Contractor, without additional payment to the Contractor. Any such additional item which the Contractor moves or causes to be moved for his own convenience shall be at his own expense.

34. TOWN OF ADDISON APPROVAL

This project is subject to final approval and acceptance by Town of Addison.

35. TRAFFIC CONTROL

The Contractor shall be responsible for providing traffic control during the construction of this Project consistent with the provisions set forth in the latest edition of the "Texas Manual on Uniform Traffic Control Devices for Streets and Highways" issued under the authority of Sections 542.202, 544.001 and 544.002 of the Texas Transportation Code. The Contractor will not remove any regulatory sign, instructional sign, street name sign, or other sign which has been erected by the City. If it is determined that a sign must be removed to permit required construction, the Contractor shall contact the Town of Addison to remove the sign. In the case of regulatory signs, the Contractor must replace the permanent sign with a temporary sign meeting the requirements of the above-referenced manual, and such a temporary sign must be installed prior to the removal of the existing sign. The Contractor shall submit a Traffic Control Plan at least five (5) calendar days prior to commencing work for review and approval

Traffic Control Plan at least five (5) calendar days prior to commencing work for review and approval by the Town of Addison.

36. CERTIFICATION

The Contractor shall submit a manufacturer's certification that the material was manufactured and tested in accordance with the referenced Specifications and a report of test results. The certification shall be submitted prior to material shipment.

ţ

37. FINAL ACCEPTANCE OF WORK

Final acceptance of the Work is subject to final testing and approval of the Work by the Town of Addison. Upon the final acceptance of the completed Work, Gaylord and Columbus shall reassign all of its rights, powers, duties and obligations retained under the construction contract from the Town of Addison back to the Town of Addison. The Town of Addison shall thereafter act and serve as the owner of the completed Work.

38. WORK AREA

Contractor shall restrict his construction activity to the project site.

39. CONTRACTOR'S AFFIDAVIT OF BILLS PAID

The Contractor shall be required to execute the form provided in Section BP prior to the acceptance of the project.

HERROROH HEZZI WINALISP