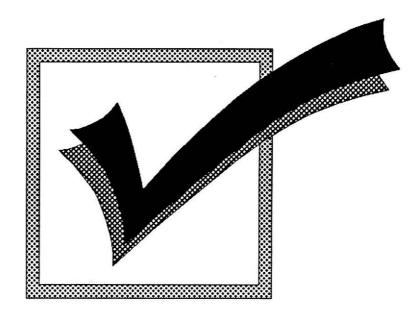


Design Checklists

Los Angeles County Metropolitan Transportation Authority







QUALITY ASSURANCE DESIGN CHECKLISTS

DESIGN CHECKLISTS

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USE OF DESIGN CHECKLISTS

USE OF DESIGN CHECKLISTS

1.0 PURPOSE

- A. Parsons Brinckerhoff/DMJM, Quality Assurance Department has developed comprehensive design checklists to verify inclusion of required items at each submittal milestone. Their purpose is to properly document completion of design elements and to identify design issues requiring additional coordination interface.
- B. These Design Checklists have been compiled jointly by Quality Assurance and the design departments. In an effort to effectively identify deficiencies, items are listed by discipline. Additional blank checklists have been provided to allow for inclusion of other items as appropriate.
- C. Communication among the design discipline groups will minimize discrepancies in verification and coordination. Key indicators of conformance to standards are formatted into checklists that identify areas requiring further coordination. The following is designed to assist in the usage of the Design Checklists.

2.0 PROCEDURE

- A. Prior to completion of each milestone submittal, the Design Checklists shall be completed for the required elements of the submittal. The Project Unit Manager shall ensure that a set of Design Checklists is completed for each discipline of work shown on the drawings or described in the specifications. These checklists shall be completed by the discipline lead (Arch/Eng) for each discipline involved in the work. These checklists should accompany the submittal to EMC Quality Assurance for their review and verification of the submittal.
- B. Design Checklists are distributed to the Project Unit Managers and various architects/engineers, and section designers by the Quality Assurance Department. These checklists will assist in defining the level of completeness mandated by the client and the Design Quality Manual.
- C. The checklists distribution will be scheduled approximately twenty (20) working days prior to the submittal date of the contract to the client. These checklist are to be completed and returned to the Quality Assurance Department within seven days of the submittal date. This will assure time for verification and/or revisions of work completed. The design checklists will be used as objective evidence that the document set is completed and checked.
- D. These completed design checklists shall be maintained as part of the project record of conformance to design requirements. Each Project Unit Manager shall retain the original of each completed checklist along with the record copy of the submittal.

3.0 INSTRUCTIONS

- A. The Design Checklist forms require the following information. (See sample forms at the end of the instructions.)
 - 1. Reviewer: The individual conducting the review.
 - Organization: Identifies the reviewers organization as the department, division and/or company.
 - Discipline: Identifies the reviewer's area of specialty or the area of concentration for this review, i.e., architectural, civil, traction power, communications.
 - 4. Sheet of: Identifies the page and number of sheets in the Design Checklist.
 - Project: Name of the line involved in the contract under review, e.g., Metro Red Line.
 - 6. Contract No.: Identifies the RCC number of the specific contract unit being reviewed, e.g., B241.
 - 7. Contract Title: Name of the particular contract unit of work under review, e.g., Wilshire/Vermont, Train Control, I 105 to Compton.
 - 8. <u>Submittal</u>: Identifies the review submittal state: Design Definition (Preliminary), In-Progress, Pre-Final, Final or Camera Ready.
 - 9. Date: The date the Design Checklist is completed.
 - 10. <u>Discipline Name</u>: Architectural, Systems Traction Power, Communications, etc.
 - 11. CK'D Y/N: Indicates whether the reviewer has checked the items listed by marking Y (Yes) or N (No).
 - 12. OK Y/N: Indicates that the items checked satisfy the requirements of the designated state of the contract work unit being reviewed or that the previous comments have been addressed or revised.
 - 13. <u>NOTES</u>: This area is reserved for any comments pertaining to a listed item for verification, follow-up or information. Blank design checklist sheets are provided to accommodate additional items.
 - 14. <u>REQUIRED</u>: Indicates in which submittal stages the particular item is required. DD = Design Definition (Preliminary), IP = In-Progress, PF = Pre-Final, F = Final, CR = Camera Ready.

- B. Sample Design Checklists are arranged in the following order by discipline.
 - 1. Sample I: Keyed to the instructions given above.
 - Specifications Items.
 - 3. Cadd Items.
 - 4. Environmental Items.
 - 5. Right-of-Way Items.
 - Geotechnical Items.
 - 7. Trackwork Items.
 - 8. Civil Items.
 - 9. Utility Items.
 - 10. Structural Items.
 - 11. Architectural Items.
 - 12. Mechanical Items.
 - 13. Electrical Items.
 - 14. Elevators and Escalators.
 - 15. Communication Installation & Gas Monitoring/Seismic Detection Procurement
 - 16. Corrosion Control Items
 - 17. Systems Communication Closed Circuit Television.
 - 18. Systems Communication Telephone Items.
 - 19. Systems Communication Radio Items.
 - 20. Systems Communication Public Address Items.
 - 21. Systems Communication Fiber Optics.
 - 22. Systems Communication Cable Transmission Systems. Items.
 - 23. Systems Communication Train Control System Items.
 - 24. Systems Communication Transit Automatic Control and SCADA/TRACS
 - 25. Systems Communication Traction Power Items.

SAMPLE DESIGN CHECKLIST

DESIGN CHECKLIST

Reviewer:	Organization:				Discipline:			SI	_ Sheet <u>1</u> o			_1_	
Project:	Contract No.:	Cont	Contract Title:			Submittal:			Date/_/				1
			CH	D?	ок	?	NOTES		REO	UIRE	D		
			Υ	N	Υ	N			DD	IP	PF	F	CR
							W						
								-					
ī													

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DESIGN CHECKLIST

SPECIFICATIONS ITEMS

DESIGN CHECKLIST

Reviewe	Reviewer: Organization					Discipline:	Sheet <u>1</u> of _					
Project:	oject: Contract No.: Contract Title:		Title:	~		Submittal:		_ Dat	te	1		
SPEC	IFICATIONS ITEMS	СН	CH'D? OK		?	NOTES	REO					
		Υ	N	Υ	2		DD	IP	PF	F	CR	
1.	Grammar						х	Х	х	х	Х	
2.	Spelling						х	X	х	х	х	
3.	Interface Requirements							X	х	х	х	
4.	Specification Table of Contents Correct							х	х	х	х	
5.	Accuracy of Codes and Standard References							Х	х	х	х	
6.	General Conditions of the Contract (Supplied by RCC)								х	x	х	
7.	Special Provisions								х	х	х	
8.	Instruction for Bidders (Supplied by RCC)								х	х	х	
9.	Operations and Maintenance Provision								х	х	х	
10.	Form of Contract (Supplied by RCC)								х	х	х	
11.	Invitation for Bid (Supplied by RCC)								х	х	х	
12.	Reliability and Maintainability Requirements								х	х	х	
13.	Environmental Requirements								х	х	х	
14.	Schedule of Quantities and Prices								х	х	х	
15.	Submittals Specified								х	х	х	
16.	Acceptance Criteria								х	х	х	

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SPECIFICATIONS 1 of 2

DESIGN CHECKLIST

Review	Reviewer: Organization				s	heet	2	_ of	_2		
Project:	oject: Contract No.: Contract		Title:	,		Submittal:					
SPEC	IFICATIONS ITEMS	СН	'n?	OK?		NOTES	REC	UIRE	:D		
		Υ	N	Υ	N		DD	IP	PF	F	CR
17.	Testing Requirements with Acceptance Values								х	х	х
18.	Third Party Requirements Included								х	х	Х
19.	Safety Requirements					-			х	х	Х
20.	Quality Control Requirements								х	х	Х
21.	Measurement and Payment Included								х	х	Х
22.	DBE/WBE/MBE Goals (Supplied by RCC)								х	х	х
23.	Payment Item Definition									х	х
24.	Bid Items Listed									х	х
25.	Labor Compliance Requirements (Supplied by RCC)									х	х
26.	Resolution of Design Review Comments									х	х
27.	Forms for Bidding: including Bid Pricing Schedule (Supplied by RCC)									х	х
28.	Final Contract Agreement (Supplied by RCC)									х	х
29.	Prevailing Wage Tables (Supplied by RCC)									х	х

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SPECIFICATIONS 2 of 2

DESIGN CHECKLIST

CADD ITEMS

DESIGN CHECKLIST

Review	er: Organia	zation:				Discipline:		s	heet	_1_	_ of	3_
Project:	Contract No.:	_ Contrac	t Title:				Submittal:		_ Da	te	1	_/
CADI	DITEMS	С	H′D?	ОК	(?	NOTES		REC	UIRE	D.		
			N	Υ	N			DD	IP	PF	F	CR
1.	Contract Number- size = 5/32" wt = 3							х	х	х	х	х
2.	Drawing number- size = 5/32" wt = 3							х	х	х	х	х
3.	Accuracy, Consistency, and Adequacy of Dimensions.							х	х	х	х	х
4.	North Arrow Direction							х	х	х	х	х
5.	Proper Orientation of Plans, Sections, and Elevations							х	х	х	х	х
6.	Column, Reference Points and Match Lines Consistent							х	х	х	х	х
7.	Match Lines -size = 1/4" wt = 6							х	х	х	х	х
8.	Spelling							х	х	х	х	х
9.	Grammar							х	х	х	х	х
10.	Room Numbers Consistent for Set							х	х	х	х	х
11.	Meets Design Criteria							х	х	х	х	х
12.	Correct Symbols from Legend							х	х	х	х	х
13.	Index Sheets - Titles and Numbers							х	X	х	х	х
14.	Scale and Graphics Scale							х	х	х	х	х
15.	Meets Drafting Criteria (Letter Sizes)							х	х	х	х	х

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CADD 1 of 3

DESIGN CHECKLIST

Reviewe	er: Organiz	ation:				Discipline:	s	heet	2	of	3_
Project:	Contract No.:	_ Contract	Title:			Submittal:	tellediki keriliki lue	_ Dat	te	1	1
CADE	TEMS	СН	ľD?	ок	?	NOTES	REC	UIRE	D		
		Y	N	Υ	N		DD	IP	PF	F	CR
16.	Contract Number						х	х	х	х	Х
17.	Consultant Identification						х	х	х	х	х
18.	Match Line Location Coordinates						х	х	х	х	х
19.	Interface Requirements						х	х	х	х	х
20.	Date						х	х	х	х	х
21.	Signatures or Initials						х	х	х	х	x
22.	Leveling Schemes					-10		х	x	х	X
23.	Plotabilty							x	x	х	х
24.	Reference files							х	х	х	х
25.	Interface with Other Disciplines							х	х	х	X
26.	Format							х	X	х	Х
27.	Referencing Completed								х	х	х
	TEXT										
1.	Notes & Descriptions-text height-1/8"						х	x	х	х	х
2.	Detail & Section bubbles-diameter 3/4"- 5/8"	14					х	х	х	х	х
3.	Line Weight consistency & accuracy					a a	х	х	х	х	х
4.	Text line style-line code-0						х	х	х	х	х

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Main Title and Heading- size = 1/4" wt = 4

DESIGN CHECKLIST

Reviev	wer: Organiza	ation:				Discipline:	s	heet	_3_	_ of	_3_
Projec	t: Contract No.:	Contract	Title:			Submittal:		_ Da	te	1	1
CAL	DD ITEMS	CI	ďD?	ОН	(?	NOTES	REC	UIRE	D		
		Y	N	Υ	N		DD	IP	PF	F	CR
5.	Text font ; font -1						х	х	х	х	х
	TITLE BLOCK INFORMATION						х	х	х	х	х
1.	Plan Drawing Scale- size = 5/32" wt = 1						х	х	X	х	х
2.	Scale Call-out- size = 3/16" wt = 3						х	х	х	х	х
3.	Sub-Titles- size = 7/32" wt = 3						x	х	X	X	х

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CADD 3 of 3

DESIGN CHECKLIST

ENVIRONMENTAL ITEMS

DESIGN CHECKLIST

Reviewer:	Organization:					Discipline:	s	heet	_1_	_ of	_1_
Project:	Contract No.: Con	tract	Title:			Submittal:		_ Dat	te		1
ENVIRONMENTA	L ITEMS	СН	D?	ОК	?	NOTES	REC	UIRE	ĒD		
		Υ	N	Υ	N		DD	IP	PF	F	CR
	PHASE I										
1. Environmen	ital Assessment. (Library Search)								х	х	х
	PHASE II										
Environment contaminat	ital Assessment for potential soil/water ion.								x	x	x
	PHASE III										
1. Environmen	tal Assessment - Remedial Action Plan									х	х

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ENVIRONMENTAL 1 of 1

RIGHT-OF-WAY ITEMS

DESIGN CHECKLIST

er: Organization:	Organization:			-	Discipline:	s	Sheet1			_4_
Contract No.: Con	tract	Title:	-		Submittal:		_ Da	te	1	
T-OF-WAY ITEMS	СН	'D?	ок	?	NOTES	REC	UIRE	D		
	Υ	N	Υ	N		DD	IP	PF	F	CR
DRAWINGS - GENERAL ITEMS										
Accuracy, Consistency, and Adequacy of Dimensions						х	x	х	х	х
Column, Reference Points and Match Lines Consistent						х	х	х	х	х
Compliance with Applicable Codes and Standards						х	х	х	х	х
Consultant Identification						х	х	х	х	х
Contract Number						х	Х	х	х	х
Correct Symbols from Legend						х	х	х	х	х
Cross Reference and Layout Index						х	х	х	х	х
Date						х	х	х	х	х
Drawing Numbers, Sheet Numbers, Revision Numbers - Shown in Order						х	X	х	х	х
Grammar						х	х	х	х	х
Index Sheets - Titles and Numbers						х	х	х	х	Х
Interface with Other Disciplines						х	х	х	х	х
Meets Design Criteria						х	х	х	х	х
Meets Drafting Criteria (Letter Sizes)						х	х	х	х	х
North Arrow Direction					я	х	х	х	х	х
	Contract No.: Con T-OF-WAY ITEMS DRAWINGS - GENERAL ITEMS Accuracy, Consistency, and Adequacy of Dimensions Column, Reference Points and Match Lines Consistent Compliance with Applicable Codes and Standards Consultant Identification Contract Number Correct Symbols from Legend Cross Reference and Layout Index Date Drawing Numbers, Sheet Numbers, Revision Numbers - Shown in Order Grammar Index Sheets - Titles and Numbers Interface with Other Disciplines Meets Design Criteria Meets Drafting Criteria (Letter Sizes)	Contract No.: Contract T-OF-WAY ITEMS CH Y DRAWINGS - GENERAL ITEMS Accuracy, Consistency, and Adequacy of Dimensions Column, Reference Points and Match Lines Consistent Compliance with Applicable Codes and Standards Consultant Identification Contract Number Correct Symbols from Legend Cross Reference and Layout Index Date Drawing Numbers, Sheet Numbers, Revision Numbers - Shown in Order Grammar Index Sheets - Titles and Numbers Interface with Other Disciplines Meets Design Criteria Meets Drafting Criteria (Letter Sizes)	Contract No.: Contract Title: T-OF-WAY ITEMS	Contract No.: Contract Title: Chr'D? OK Y N Y DRAWINGS - GENERAL ITEMS Accuracy, Consistency, and Adequacy of Dimensions Column, Reference Points and Match Lines Consistent Compliance with Applicable Codes and Standards Consultant Identification Contract Number Correct Symbols from Legend Cross Reference and Layout Index Date Drawing Numbers, Sheet Numbers, Revision Numbers - Shown in Order Grammar Index Sheets - Titles and Numbers Interface with Other Disciplines Meets Design Criteria Meets Drafting Criteria (Letter Sizes)	Contract No.: Contract Title:	Contract No.:	Contract No.: Contract Title: Submittal: COPTON OK7 TOF-WAY ITEMS CHYD N Y N DRAWINGS - GENERAL ITEMS Accuracy, Consistency, and Adequacy of Dimensions Column, Reference Points and Match Lines Consistent Compliance with Applicable Codes and Standards Consultant Identification Correct Symbols from Legend Cross Reference and Layout Index Date Drawing Numbers, Sheet Numbers, Revision Numbers - Shown in Order Grammar Index Sheets - Titles and Numbers Meets Design Criteria Meets Drafting Criteria (Letter Sizes) NOTES NOTES REC DOX NOTES REC DOX NOTES NOTES REC DOX NOTES NOTE	Contract No.:	Contract No.: Contract Title: Submittal: Date	Contract No.:

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Right-of-Way 1 of 4

DESIGN CHECKLIST

Reviewe	Organization:				Discipline:					_ of	4_
Project:	Contract No.:	_ Contract	Title:			Subm	nittal:	Da	te	1	
RIGH	T-OF-WAY ITEMS	СН	'D?	ок	.7	NOTES	RE	QUIR	ED		
		Υ	N	Υ	N		DD	IP	PF	F	CR
16.	Proper Orientation of Plans, Sections, and Elevations						х	х	х	х	х
17.	Room Numbers Consistent for Set						х	х	х	х	х
18.	Scale and Graphics Scale						х	х	х	х	х
19.	Spelling						х	х	х	х	х
20.	Title Block Format						х	х	х	х	х
21.	Coordination with Other Contracts							х	х	х	х
22.	Criteria Conformance Checklist							х	х	х	х
23.	Match Line Location Coordinates							х	х	х	х
24.	Standard Drawings Referenced							х	х	х	х
25.	Discipline Drawings Referenced								х	х	х
26.	Freedom from Interferences								х	х	х
27.	Third Party Requirements Included								х	х	х
28.	Work Space and Access Space								х	х	х
29.	Referencing Completed					er er				х	х
30.	Resolution of Design Review Comments									х	х
31.	Signatures (Including P.E. Stamps)										х

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Right-of-Way 2 of 4

DESIGN CHECKLIST

Review	eviewer: Organization:		Discipline:						Sheet <u>3</u> of					
Project:	Contract No.: Con	tract	tract Title:			Submittal:		_ Dat		1	1			
RIGH	T-OF-WAY ITEMS	СН	'D?	ок	?	NOTES	REC							
		Υ	N	Υ	N		DD	IP	PF	F	CR			
	RIGHT-OF-WAY ITEMS													
1.	Area Shading or Cross-Hatching of Impacted Parcels						X	х	X	X	x			
2.	Note: For Information Only (Text)						х	х	х	X	х			
3.	Grid Tics (At Least Two Per Sheet Annotated)						х	х	х	х	х			
4.	Assigned Number of Impacted Parcels						х	х	х	X	х			
5.	Real Estate Data Base						х	х	х	х	х			
6.	Property Identification Maps					For Preliminary Eng; used to identify properties impacted and to order title reports	х	х	x	x	х			
7.	Aerial Topography Drawings					Sub-Consultant Product	х	х	х	х	х			
8.	Property Ownership Table				S.		x	х	х	х	х			
9.	Tract and Parcel Names and/or Numbers (Including Recording Information and Individual Lot or Parcel Numbers)						x	X	x	X	х			
10.	Street Names						x	х	х	х	х			
11.	Street Dimensions							х	х	х	х			
12.	Existing Conditions (Topographic) Drawings	191				Sub-Consultant Product		х	х	х	х			
13.	Title Report of Impacted Parcels							х	х	х	х			

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Right-of-Way 3 of 4

DESIGN CHECKLIST

Reviewe	or: Organization:	Organization:				Discipline:	s	heet _	4	of	4
Project:	Contract No.: Contract No.:	Contract Title:			Submittal:				Date/_		
RIGH	T-OF-WAY ITEMS	СН	'D?	ок	.?	NOTES	REO				
		Υ	N	Υ	N		DD	IP	PF	F	CR
14.	Right-of-Way Maps					Base maps completed with ROW acquisition areas plotted		X	Х	Х	Х
15.	Survey Control Monumentation Drawings					Sub-Consultant Product		X	х	x	х
16.	Right-of-Way Impact on Parcels Annotated							х	х	х	х
17.	Right-of-Way Annotated							х	х	х	х
18.	Benchmarks							х	х	х	х
19.	Lot Closure of Impacted Parcels							х	х	х	х
20.	Street Centerlines Annotated							х	х	х	х
21.	Parcel Boundaries Annotated							х	х	х	х
22.	Survey Control Referenced (Monuments and Centerline Intersections)								х	x	х
23.	Right-of-Way Maps					Basic acquisition areas quantified; survey control shown; most title exceptions shown			х	x	х
24.	Right-of-Way Maps					Additional ROW needs shown &				х	х

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Right-of-Way 4 of 4

completed

GEOTECHNICAL ITEMS

DESIGN CHECKLIST

Review	er: Organization:			Discipline: Sheet _ 1							_3
Project	: Contract No.: Con	tract	Title:			Submittal:		_ Da	te	1	1
GEO	TECHNICAL ITEMS	СН	'D?	ок	?	NOTES	REC	UIRI	ED		
		Υ	N	Υ	N		DD	IP	PF	F	CR
	DRAWINGS - GENERAL ITEMS										
1.	Accuracy, Consistency, and Adequacy of Dimensions						х	х	x	х	х
2.	Column, Reference Points and Match Lines Consistent						х	х	х	х	х
3.	Compliance with Applicable Codes and Standards						х	х	х	х	х
4.	Consultant Identification						х	х	х	х	х
5.	Contract Number						х	х	х	х	х
6.	Correct Symbols from Legend						x	х	х	х	х
7.	Cross Reference and Layout Index						x	х	х		х
8.	Date						x	х	х		х
9.	Drawing Numbers, Sheet Numbers, Revision Numbers - Shown in Order						х	х	х	х	x
10.	Grammar						x	х	х	х	х
11.	Index Sheets - Titles and Numbers						x	х	х	х	х
12.	Meets Design Criteria						x	х	х	х	х
13.	Meets Drafting Criteria (Letter Sizes)						х	x	х		х
14.	North Arrow Direction					10	х		х		х

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GEOTECHNICAL-1 of 3

DESIGN CHECKLIST

Reviewe	er: Organization	on:		Discipline:					Sheet <u>2</u> of _					
Project:	Contract No.: C	Contract	Title:				Submittel:							
GEOT	ECHNICAL ITEMS	СН	D?	ОК	?	NOTES		REC	UIRE	:D				
		Y	N	Υ	N			DD	IP	PF	F	CR		
15.	Proper Orientation of Plans, Sections, and Elevations							х	х	х	х	х		
16.	Room Numbers Consistent for Set							х	х	х	х	х		
17.	Scale and Graphics Scale							х	х	х	х	х		
18.	Spelling							х	х	х	x	х		
19.	Title Block Format							х	х	х	X	x		
20.	Criteria Conformance Checklist								х	х	×	x		
21.	Interface with Other Disciplines								х	х	x	x		
22.	Interface Requirements								х	х	х	х		
23.	Match Line Location Coordinates								х	х	х	х		
24.	Standard Drawings Referenced								х	х	х	х		
25.	Discipline Drawings Referenced						VIII.			х	х	х		
26.	Freedom from Interferences									х	х	х		
27.	Third Party Requirements Included									х	х	х		
28.	Work Space and Access Space									х	х	х		
29.	Referencing Completed										х	х		
30.	Resolution of Design Review Comments										х	x		
31.	Signatures (Including P.E. Stamps)											x		

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GEOTECHNICAL-2 of 3

DESIGN CHECKLIST

Review	er:	Organization:					Discipline:	Discipline:					_3_
Project	Contract No.:	Contrac	t T	Fitle:			Sub	mittal:		_ Dat	te	1	1
GEO ⁻	TECHNICAL ITEMS	С	H'	D?	ок	?	NOTES		REQ	UIRE	D		
				N	Υ	N			DD	IP	PF	F	CR
	GEOTECHNICAL ITEMS										1		
1.	Compaction Requirements Noted						8				х	X.	х
2.	Geotechnical Plans and Profile	Ta Carlo						. SA			х	х	х
3.	Soil and Rock Types Identified										х	х	х
4.	Geotechnical Report										х	х	X
5.	Boring Log Data (Soil Properties)			3 - 1311 - 31							х	х	х
6.	Geotechnical Design Summary Report	t										х	Х

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TRACKWORK ITEMS

DESIGN CHECKLIST

Review	er: Organization:					Discipline:	s	heet	_1_	of	_4_
Project:	Contract No.: Contract No.:	tract	Title:			Submittal:		_ Dat	te	1	1
TRAC	CKWORK ITEMS	СН	'D?	ок	?	NOTES	REC	UIRE	D		
		Υ	N	Υ	N		DD	IP	PF	F	CR
	DRAWINGS - GENERAL ITEMS										
1.	Accuracy, Consistency, and Adequacy of Dimensions						х	х	х	х	х
2.	Column, Reference Points and Match Lines Consistent						х	х	х	х	х
3.	Compliance with Applicable Codes and Standards						х	х	х	х	Х
4.	Consultant Identification						х	х	х	х	х
5.	Contract Number						х	х	х	х	х
6.	Correct Symbols from Legend						х	х	х	X	х
7.	Cross Reference and Layout Index						х	х	х	х	Х
8.	Date						х	х	х	х	Х
9.	Drawing Numbers, Sheet Numbers, Revision Numbers - Shown in Order						×	х	х	х	х
10.	Grammar						х	х	х	х	х
11.	Index Sheets - Titles and Numbers						х	Х	х	х	X
12.	Meets Drafting Criteria (Letter Sizes)						х	х	х	х	х
13.	Meets Design Criteria						х	х	х	х	х
14.	North Arrow Direction						х	х	х	х	Х

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TRACKWORK 1 of 4

DESIGN CHECKLIST

Reviewe	or: Orga	nization:					Discipline:		SI	heet _	2_	of	4
Project:	Contract No.:	Cont	tract '	Title:				Submittal:		_ Dat	е	_/	1
TRAC	KWORK ITEMS		CH	D?	ок	?	NOTES		REO	UIRE	D		
	e .		Υ	N	Υ	N			DD	IP	PF	F	CR
15.	Proper Orientation of Plans, Sections, and Elevations								х	x	х	х	X
16.	Room Numbers Consistent for Set								X	X	х	х	Х
17.	Scale and Graphics Scale								X	X	x	x	X
18.	Spelling								х	X	х	X	х
19.	Title Block Format								х	х	х	x	х
20.	Coordination with Other Contracts									х	х	x	х
21.	Criteria Conformance Checklist									х	х	X	х
22.	Interface with Other Disciplines									х	х	x	х
23.	Match Line Location Coordinates						1)			х	х	х	х
24.	Standard Drawings Referenced							>*		х	х	х	х
25.	Discipline Drawings Referenced										х	x	Х
26.	Freedom from Interferences										х	х	Х
27.	Third Party Requirements Included										Х	х	X
28.	Work Space and Access Space										х	х	X
29.	Referencing Completed											х	х
30.	Resolution of Design Review Comments											х	X
31.	Signatures (Including P.E. Stamps)												x

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TRACKWORK 2 of 4

DESIGN CHECKLIST

Reviewe	er: Organization:					Discipline:	s	heet _	3	of	_4_
Project:	Contract No.: Contract No.:	tract	Title:			Submittal:		_ Dat	te	1	1
TRAC	CKWORK ITEMS	СН	'D?	ОК	?	NOTES	REC	UIRE	D		17
		Υ	N	Y	N		DD	IP	PF	F	CR
	TRACKWORK ITEMS										
1.	Proper Units and Decimals on Stationing							x	х	x	X
2.	Concrete Classes and Mix Design Noted							х	х	х	X
3.	Track Accessories Detailed					¥			х	х	Х
4.	Testing Requirements and Acceptance Values Noted								x	X	x
5.	Survey Information Sufficient to Lay Out Work Required								х	х	х
6.	Stirrups and Reinforcing Clear								х	х	X
7.	Existing Structures and Conditions								х	х	Х
8.	Construction or Lay Down Staging Areas Defined or Delineated								x	х	х
9.	Rail Lengths Identified								x	х	х
10.	Welding Inspection and Testing Identified								х	х	х
11.	Rail Testing Identified								х	х	Х
12.	Fastener Testing Identified								х	х	х
13.	Isolation Pads Included								x	х	х
14.	14. Ties Specified								х	x	X

TRACKWORK 3 of 4

DESIGN CHECKLIST

Reviewer: Organization		ization:	Discipline:				Sheet4			of	_4_	
Project	: Contract No.:	_ Contract	Title:				Submittal:	i a compana	_ Dat	te	1	1
TRA	CKWORK ITEMS	СН	′D?	ОК	.7	NOTES		REC	UIRE	Đ		
		Υ	N	Υ	N			DD	IP	PF	F	CR
15.	Cross References between Procurement Contracts										х	x
16	Alignment Calculations Verified										x	х

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CIVIL ITEMS

DESIGN CHECKLIST

Reviewe	r: Organization:					Discipline:	s	heet	1_	of	_4_
Project:	Contract No.: Cont	tract '	Title:		- H-	Submittal:		_ Dat	е	1	1
CIVIL	ITEMS	СН	D?	ок	?	NOTES	REC	UIRE	D		
		Υ	N	Υ	N		DD	IP	PF	F	CR
	DRAWINGS - GENERAL ITEMS										
1.	Accuracy, Consistency, and Adequacy of Dimensions						х	х	X	х	х
2.	Column, Reference Points and Match Lines Consistent						х	х	x	х	x
3.	Compliance with Applicable Codes and Standards						х	х	х	х	Х
4.	Consultant Identification						х	х	х	х	Х
5.	Contract Number						х	х	х	х	Х
6.	Correct Symbols from Legend						х	х	х	х	Х
7.	Cross Reference and Layout Index						х	х	х	х	Х
8.	Date						х	х	х	х	Х
9.	Drawing Numbers, Sheet Numbers, Revision Numbers - Shown in Order						х	X	X	х	x
10.	Grammar						х	х	х	х	х
11.	Index Sheets - Titles and Numbers						х	X	Х	х	X
12.	Meets Design Criteria						х	х	х	х	Х
13.	Meets Drafting Criteria (Letter Sizes)						х	х	х	х	Х
14.	North Arrow Direction						х	х	х	х	Х

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CIVIL 1 of 4

DESIGN CHECKLIST

Reviewe	er: Organization	Organization:				Discipline:	s	_4_			
Project:	Contract No.: Con	ntract	Title:			Submittal:		_ Dat	e	1	1
CIVIL	ITEMS	СН	′D?	ок	?	NOTES	REO	UIRE	D		
		Υ	N	Υ	N		DD	IP	PF	F	CR
15.	Proper Orientation of Plans, Sections, and Elevations						х	Х	х	х	Х
16.	Room Numbers Consistent for Set						X	X	X	х	х
17.	Scale and Graphics Scale						х	X	х	х	X
18.	Spelling						х	X	х	х	X
19.	Title Block Format						х	х	X	х	x
20.	Coordination with Other Contracts							x	х	х	х
21.	Criteria Conformance Checklist							х	х	х	х
22.	Interface with Other Disciplines							х	х	х	х
23.	Match Line Location Coordinates							х	х	х	х
24.	Standard Drawings Referenced							х	х	х	х
25.	Discipline Drawings Referenced								х	х	х
26.	Freedom from Interferences								х	х	х
27.	Third Party Requirements Included								х	х	х
28.	Work Space and Access Space								х	х	х
29.	Referencing Completed									х	х
30.	Resolution of Design Review Comments									х	х
31.	Signatures (Including P.E. Stamps)										х

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CIVIL 2 of 4

DESIGN CHECKLIST

Project: Contract No.: Contract Title: Submittal: Date CIVIL ITEMS CH'D? OK? NOTES REQUIRED	T 1	/
CIVIL ITEMS CH'D? OK? NOTES REQUIRED	F	
	F	
Y N Y N DD IP PF		CR
CIVIL ITEMS		
1. Right of Way Plans (for Information) X X X	х	Х
2. Proper Font for Lettering X X X	x	X
3. Scales on All Sheets X X X	x	Х
4. Alignment of Route Finalized X X X	х	X
5. Proper Line Weight X X X	х	X
6. Vicinity Map with Key to Other Sheets X X X	х	X
7. Column Lines Coordianted with Architectural X X X	х	х
8. Location Map with North Arrow X X X	х	Х
9. Coordination with City Services and Utility Companies	x	х
10. USGS Coordinates Referenced X X	х	х
11. Concrete Track Ties and Base Detailed X X	х	Х
12. Proper Units and Decimals on Stationing	х	х
13. Bottom and Top Elevations of Drilling Pins	x	х
14. Survey Information Sufficient to Lay Out Work Required	x	x
15. Concrete Classes and Mix Designs Clear X X	х	х
16. Testing Requirements and Acceptance Values	х	х

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CIVIL 3 of 4

DESIGN CHECKLIST

Reviewe	er: Organization:	Discipline:						Sheet _4_			
Project:	Contract No.: Con	tract	Title:			Submittal:		_ Da	te		1
CIVIL	ITEMS	СН	D?	ОК	(?	NOTES	REC	UIRE	ĒD_		
		Υ	N	Υ	N		DD	IP	PF	F	CR
17.	Worksite Traffic Control Plan Provided by LADOT								Х	х	Х
18.	Track Accessories Detailed								x	х	х
19.	Stirrups and Reinforcing Clear								х	х	х
20.	Route Stationing on Each Sheet								х	х	х
21.	Final Check for Basis of Bearings and Elevations								х	х	х
22.	City Designed Traffic Signals.								х	х	х
23.	Completed Site Restoration Plans								х	x	х
24.	Index of Sheets Pertinent to City Facilities - Signed by City								x	x	х
25.	Demolition Plans, Coordinated with ROW Acquisitions								x	x	x
26.	Construction or Lay Down Staging Areas Delineated								х	х	х
27.	Existing Conditions, Final								x	х	х

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DESIGN CHECKLIST

UTILITY ITEMS

DESIGN CHECKLIST

Reviewe	er: Organization:		Discipline:					Sheet <u>1</u> of _					
Project:	Contract No.: Cont	tract	Title:			Submittal:		_ Dat	te	1	1		
UTILI	TY ITEMS	Che	cked	Veri	fied	NOTES	REQUIRED						
		Υ	N	Υ	2		DD	IP	PF	F	CR		
	DRAWINGS - GENERAL ITEMS												
1.	Accuracy, Consistency, and Adequacy of Dimensions						х	X	х	х	х		
2.	Column, Reference Points and Match Lines Consistent						х	X	х	х	х		
3.	Compliance with Applicable Codes and Standards						х	х	х	х	х		
4.	Consultant Identification						х	х	х	х	х		
5.	Contract Number						х	х	х	х	х		
6.	Correct Symbols from Legend						х	х	х	х	х		
7.	Cross Reference and Layout Index						х	Х	х	х	х		
8.	Date						х	х	х	х	х		
9.	Drawing Numbers, Sheet Numbers, Revision Numbers - Shown in Order						х	x	x	х	х		
10.	Grammar						х	х	х	х	х		
11.	Index Sheets - Titles and Numbers						х	Х	х	х	х		
12.	Meets Design Criteria						х	х	х	х	х		
13.	Meets Drafting Criteria (Letter Sizes)	85				S. S	х	х	х	х	х		
14.	North Arrow Direction					5	х	х	х	х	х		

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UTILITY 1 of 4

DESIGN CHECKLIST

Review	er: Organiz	ation:				Discipline:	s	heet	_2_	_ of	_4_
Project	Contract No.:	Contract	Title:			Submittal:	- 1	_ Daf	te		
UTIL	ITY ITEMS	Che	cked	Veri	fied	NOTES	REC	UIRE	==== ED		
		Y	N	Υ	N		DD	IP	PF	F	CR
15.	Proper Orientation of Plans, Sections, and Elevations						х	х	х	х	х
16.	Room Numbers Consistent for Set						x	х	х	х	х
17.	Scale and Graphics Scale						х	х	х	х	х
18.	Spelling						x	х	х	х	х
19.	Title Block Format						x	х	х	х	х
20.	Coordination with Other Contracts							х	х	х	х
21.	Criteria Conformance Checklist							х	х	х	х
22.	Interface with Other Disciplines							х	х	х	х
23.	Match Line Location Coordinates							х	х	х	х
24.	Standard Drawings Referenced							х	х	х	х
25.	Discipline Drawings Referenced								х	х	х
26.	Freedom from Interferences								х	х	х
27.	Third Party Requirements Included								х	х	Х
28.	Work Space and Access Space								х	х	Х
29.	Referencing Completed									х	х
30.	Resolution of Design Review Comments									х	х
31.	Signatures (Including P.E. Stamps)										х
							1		(597

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DESIGN CHECKLIST

Review	er: Organization:				Discipline:	s	_4_				
Project	Contract No.: Contract No.:	tract	Title:	-		Submittal:		_ Dat	te		1
UTIL	ITY ITEMS	Chec	cked	Veri	ified	NOTES	REC	UIRE	D		
		Υ	N	Υ	N		DD	IP	PF	F	CR
	UTILITY ITEMS										
1.	Utility Rearrangement Drawings					2	х	х	х	X.	х
2.	Electrical Rearrangement Drawings						х	х	х	х	х
3.	Telephone Rearrangement Drawings					V	х	х	х	х	х
4.	Water Rearrangement Drawings						х	Х	х	х	х
5.	Gas Rearrangement Drawings						х	х	х	х	х
6.	Telegraph Rearrangement Drawings						х	Х	х	х	х
7.	Traffic Signal Temporary/Restoration Drawings						х	Х	х	х	х
8.	Sanitary Sewer Rearrangement						х	х	х	х	х
9.	Sanitary Sewer Profile Drawings						х	х	х	х	х
10.	Coordination with City Services and Utility Companies						х	X	х	х	х
11.	Electrical Profile Drawings							X	х	х	х
12.	Telephone Profile Drawings							х	х	х	х
13.	Water Profile Drawings							х	х	х	х
14.	Gas Profile Drawings							х	х	х	х
15.	Telegraph Profile Drawings							х	х	х	х
16.	Storm Drain Profile Drawings							х	х	х	х

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DESIGN CHECKLIST

Reviewer: Organi		:				Sheet <u>4</u>			_ of	_4_	
Project	Contract No.: Co	ntract	Title:			Submittal:		_ Da	te		1
UTIL	ITY ITEMS	Che	cked	Ver	ified	NOTES	REC	QUIRED			
		Y	N	Υ	N		DD	IP	PF	F	CR
17.	Electrical Manholes Located							х	х	х	х
18.	Telephone/Electrical Facilities, General Layout							х	х	х	х
19.	Water Supply System, General Layout							х	х	х	х
20.	Gas Supply System, General Layout					E .	1	х	х	х	х
21.	Storm Drain Plan Drawings							х	х	х	х
22.	Telephone Detail Drawings								х	х	х
23.	Water Detail Drawings								х	х	х
24.	DWP Standards and Detail Drawings								х	х	х
25.	City Designed Street Lighting Plans or Project Drawings								x	х	x
26.	Utilities Standards, Abbreviations and Symbols								х	х	х

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DESIGN CHECKLIST

Reviewe	er: Organization	:				Discipline:	SI	heet _	1_	of	_4_
Project:	Contract No.: Co	ntract	Title:			Submittal:		_ Dat	te	1	1
TRAII	N CONTROL SYSTEM	СН	ľD?	ок	?	NOTES	REO	UIRE	D		
		Y	N	Υ	N		DD	IP	PF	F	CR
	DRAWINGS - GENERAL ITEMS										
1.	Accuracy, Consistency, and Adequacy of Dimensions						x	X	x	X	x
2.	Column, Reference Points and Match Lines Consistent						x	X	х	X	х
3.	Compliance with Applicable Codes and Standards					,	x	X	х	х	х
4.	Consultant Identification						х	X	х	х	х
5.	Contract Number						х	X	х	х	х
6.	Correct Symbols from Legend						х	X	х	X	х
7.	Cross Reference and Layout Index						X	X	х	х	х
8.	Date						х	X	x	х	х
9.	Drawing Numbers, Sheet Numbers, Revision Numbers - Shown in Order		•				х	х	х	х	х
10.	Grammar						х	X	x	х	х
11.	Index Sheets - Titles and Numbers						х	X	х	х	х
12.	Meets Design Criteria						х	X	х	х	х
13.	Meets Drafting Criteria (Letter Sizes)						х	X	х	х	х
14.	North Arrow Direction						X	X	x	х	х

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TRAIN CONTROL 1 of 4

DESIGN CHECKLIST

Reviewe	or: Org	anization:	-				Discipline:		s	heet _	2_	_ of	_4
Project:	Contract No.:	Con	tract '	Title:				Submittal:		_ Dat	0	1	1
TRAI	N CONTROL SYSTEM		СН	D?	ок	?	NOTES		REC	UIRE	D		
	±		Υ	N	Υ	N			DD	IP	PF	F	CR
15.	Proper Orientation of Plans, Sections, and Elevations								х	х	Х	х	X
16.	Room Numbers Consistent for Set								х	X	х	х	х
17.	Scale and Graphics Scale								х	x	х	х	х
18.	Spelling								х	X	х	х	х
19.	Title Block Format								х	X	х	х	х
20.	Coordination with Other Contracts									х	х	х	х
21.	Criteria Conformance Checklist									X	х	х	х
22.	Interface with Other Disciplines	- 36								х	х	х	х
23.	Match Line Location Coordinates						9.			х	х	х	х
24.	Standard Drawings Referenced									х	х	х	х
25.	Discipline Drawings Referenced										х	х	х
26.	Freedom from Interferences										х	х	х
27.	Third Party Requirements Included										х	х	х
28.	Work Space and Access Space										х	х	х
29.	Referencing Completed											х	х
30.	Resolution of Design Review Comments											х	х
31.	Signatures (Including P.E. Stamps)												X

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TRAIN CONTROL 2 of 4

DESIGN CHECKLIST

Review	er: Organization:					Discipline:	s	heet _	3_	of	_4_
Project:	Contract No.: Cont	ract '	Title:			Submittal:		_ Dat	8	1	1
TRAI	N CONTROL SYSTEM	СН	'D?	ок	?	NOTES	REC	UIRE	D		
		Y	N	Υ	2		DD	IP	PF	F	CR
	TRAIN CONTROL SYSTEM										
1.	Size and Location of Train Control Room						х	Х	x	х	х
2.	Battery Room Conduit Routing							х	X	х	х
3.	Comments from Previous Submittal, Action Complete					·		X	X	х	х
4.	Battery Locations Identified							X	x	х	х
5.	Conduit Routing and Disconnect Location to Train Control Room							x	X	х	х
6.	Systemwide Pull Boxes Identified & Located							х	х	х	х
7.	Layout of Train Control Room							х	х	х	х
8.	Systemwide Duct Banks Labeled							х	х	х	х
9.	Conduit and/or Pull Boxes for Switch Machine Installations								X	x	х
10.	Conduit or Duct Routing Within Train Control Room								х	x	х
11.	All Problem Areas Resolved									х	х
12.	Access Openings Identified					*					
	a. Pull Boxes Located							х	х	х	х
	b. Interlocking Indication Signals								х	х	х

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DESIGN CHECKLIST

Reviewer:		Organization: _					Discipline:		s	heet _	4	of	_4_
Project:	Contract No.:	Contra	ct T	Title:				Submittal:		_ Dat	te	1	1
TRAIN CONTROL S	YSTEM		CH'	D?	ок	?	NOTES		REC	UIRE	D		
			Υ	N	Υ	N			DD	IP	PF	F	CR
c. Wayside F	Pushbuttons										х	х	X
13. Testing Requi	irements Specified										x	х	x

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DESIGN CHECKLIST

STRUCTURAL ITEMS

DESIGN CHECKLIST

Reviewe	er: Organization:					Discipline:	S	heet _	1_	of	_4_
Project:	Contract No.: Con	tract	Title:			Submittal:		_ Dat	te	1	1
STRU	CTURAL ITEMS	СН	'D?	ок	?	NOTES	REC	UIRE	D		
		Υ	N	Υ	N		DD	IP	PF	F	CR
	DRAWINGS - GENERAL ITEMS										
1.	Accuracy, Consistency, and Adequacy of Dimensions						х	X	х	х	х
2.	Column, Reference Points and Match Lines Consistent						x	х	х	х	X
3.	Compliance with Applicable Codes and Standards						х	х	х	х	Х
4.	Consultant Identification						х	х	х	х	X
5.	Contract Number						х	X	х	х	х
6.	Correct Symbols from Legend						Х	X	х	х	X
7.	Cross Reference and Layout Index						х	x	х	х	X
8.	Date						х	X	х	х	х
9.	Drawing Numbers, Sheet Numbers, Revision Numbers - Shown in Order						х	X	х	х	х
10.	Grammar						х	х	х	Х	х
11.	Index Sheets - Titles and Numbers						х	х	Х	х	Х
12.	Meets Design Criteria						х	х	х	х	х
13.	Meets Drafting Criteria (Letter Sizes)						х	х	х	х	х
14.	North Arrow Direction						х	X	х	х	х

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DESIGN CHECKLIST

Reviewe	er: Organization:	Organization:				Discipline:	s	heet _	2	of	_4_
Project:	Contract No.: Cor	tract	Title:			Submittal:		_ Dat	е	1	1
STRU	ICTURAL ITEMS	СН	'D?	ОК	?	NOTES	REO	UIRE	D		
		Υ	N	Υ	N		DD	IP	PF	F	CR
15.	Proper Orientation of Plans, Sections, and Elevations		×				х	X	X	х	х
16.	Room Numbers Consistent for Set						x	X	X	х	X
17.	Scale and Graphics Scale						х	X	х	х	Х
18.	Spelling						х	x	х	х	х
19.	Title Block Format						х	X	х	х	х
20.	Coordination with Other Contracts							X	X	х	х
21.	Criteria Conformance Checklist							X	х	X	х
22.	Interface with Other Disciplines							X	x	х	х
23.	Match Line Location Coordinates							X	х	х	х
24.	Standard Drawings Referenced							X	х	х	х
25.	Discipline Drawings Referenced								х	х	х
26.	Freedom from Interferences								х	х	X
27.	Third Party Requirements Included								х	х	х
28.	Work Space and Access Space								х	х	х
29.	Referencing Completed									х	х
30.	Resolution of Design Review Comments									х	х
31.	Signatures (Including P.E. Stamps)										х

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DESIGN CHECKLIST

Review	er: Organization:	Organization:						Sheet	_3	_ of	_4_
Project: Contract No.:		tract	Title:			Submittel:		Da	ite	1	_/_
STRUCTURAL ITEMS		СН	D?	ок	?	NOTES	RE	QUIR	ED		
		Y	N	Υ	N		DD	IP	PF	F	CR
	STRUCTURAL ITEMS										
1.	General Plans & Cross Sections						х	х	х	х	х
2.	Detailed Plans & Cross Sections							х	х	х	х
3.	Protective Barriers Around Fire Hydrants							х	х	х	х
4.	Welder Qualifications Stated Per AWS (Specs)								х	х	х
5.	Column Lines and Background Coordinated with Architectural								х	х	х
6.	Alignment Data for AR, AL Tracks								х	х	х
7.	Completed Plans & Cross Sections								x	х	х
8.	Fastener Sizes, Specified with Connection Details								х	х	х
9.	Ladder Safety Devices							3.	х	х	х
10.	Concrete Reinforcing Details According to ACI and CRSI Standards								x	х	х
11.	Structural Welding Details Per AWS								х	х	х
12.	Structural Steel Details Per AISC								х	х	х
13.	Grates Over Sumps								x	х	х
14.	HDPE Closures and Welding					i i			х	х	х
15.	Reinforcement Locations								х	х	х
16.	Concrete Strength Shown								х	х	х

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STRUCTURAL 3 of 4

DESIGN CHECKLIST

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Project	: Contract No.:	Cont	ract '	Title:			Submittal:		_ Da	te	1	
STR	UCTURAL ITEMS		СН	′D?	ок	?	NOTES	REC	QUIRI	ED		
			Υ	N	Υ	N		DD	IP	PF	F	CR
17.	Dowel Locations									х	х	х
18.	Seismic Criteria									х	х	х
19.	Local Code Requirements									х	х	х
20.	Fire Code Items									х	х	х
21.	Concrete Mix Design Specified									х	х	х
22.	Concrete Testing Specified									х	х	х
23.	Welding Testing Specified									х	х	х

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DESIGN CHECKLIST

ARCHITECTURAL ITEMS

DESIGN CHECKLIST

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Proje	ct: Contract No.: Contract No.:	tract	Title:			Submittal:		_ Dat	е	1	1
AR	CHITECTURAL ITEMS	СН	'D?	ок	?	NOTES	REO	UIRE	D		
		Υ	N	Υ	N		DD	IP	PF	F	CR
	DRAWINGS - GENERAL ITEMS										
1.	Accuracy, Consistency, and Adequacy of Dimensions						х	x	х	х	x
2.	Column, Reference Points and Match Lines Consistent						х	x	х	х	х
3.	Compliance with Applicable Codes and Standards						х	х	х	х	х
4.	Consultant Identification						х	Х	х	х	х
5.	Contract Number						х	х	х	х	Х
6.	Correct Symbols from Legend						х	х	х	х	х
7.	Cross Reference and Layout Index						х	Х	х	х	х
8.	Date						х	х	х	х	х
9.	Drawing Numbers, Sheet Numbers, Revision Numbers - Shown in Order						х	х	х	x	х
10.	Grammar						х	х	х	х	X
11.	Index Sheets - Titles and Numbers						х	х	х	х	X
12.	Meets Design Criteria						х	х	х	х	Х
13.	Meets Drafting Criteria (Letter Sizes)						х	х	х	х	X
14.	North Arrow Direction						х	х	х	х	Х

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ARCHITECTURAL 1 of 8

DESIGN CHECKLIST

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Project: Contract No.:	Contract	Title:	-		Submittal:		_ Da	ite				
ARCHITECTURAL ITEMS	СН	'D?	ок	?	NOTES	REC	QUIRI	ED				
	Y	N	Υ	N		DD	IP	PF	F	CR		
15. Proper Orientation of Plans, Sections, an Elevations	nd					х	х	х	х	х		
16. Room Numbers Consistent for Set						x	х	x	x	х		
17. Scale and Graphics Scale						x	х	x		x		
18. Spelling						x	х	х	х	x		
19. Title Block Format						x	x	x	x	x		
20. Coordination with Other Contracts							х	х	x	x		
21. Criteria Conformance Checklist							х	х	x	x		
22. Interface with Other Disciplines							x	х	x	х		
23. Match Line Location Coordinates							х	х	х	х		
24. Standard Drawings Referenced							х	х	х	х		
25. Discipline Drawings Referenced								х	х	х		
26. Freedom from Interferences								х	х	х		
27. Third Party Requirements Included						1		х	х	х		
28. Work Space and Access Space								х	х	х		
29. Referencing Completed									x	х		
30. Resolution of Design Review Comments									х	x		
31. Signatures (Including P.E. Stamps)										х		
							4	1 /		1		

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DESIGN CHECKLIST

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	ct: Contract No.: Cont						Submittal: Date			1	1
AR	CHITECTURAL ITEMS	СН	'D?	ок	?	NOTES	REO	UIRE	D		
, 20 10 -		Υ	N	Υ	N		DD	IP	PF	F	CR
	ARCHITECTURAL ITEMS					4					
1.	Ramp Dimensions and Percentage Slope Shown					,		Х	х	х	X
2.	Coordination with Design Criteria							X	х	х	X
3.	Driveway Apron and Handicapped Curb Cut Shown							Х	х	х	X
4.	Location of Station Identifying Pylon Shown							X	х	х	X
5.	Layout and Property Lines in Accord with Preliminary Design Submittal							х	x	х	X
6.	Hatches and Gratings 4 ft. from Street Curb								х	х	х
7.	Emergency Exit Hatch Dimensioned Per Structural Standard								х	х	х
8.	Streets and Site Improvements Labeled and Dimensioned								x	х	x
9.	Blast Relief Shafts (BRS)								Х	х	Х
10.	Emergency Exit Hatches								Х	X	X
11.	Exhaust Openings 40 ft. or More from Emergency Exit, Entrances, FAI etc.								x	х	x
12.	Traction Power Substation Location Coordinated								х	x	X
13.	Under Platform Exhaust (UPE)								х	x	X
14.	Fresh Air Intake (FAI)								х	х	X

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DESIGN CHECKLIST

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Proje	ct: Contract No.: Contract	tract	Title:			Submittal:		_ Dat	ө	1	1	
AR	CHITECTURAL ITEMS	СН	′D?	ок	?	NOTES	REC	UIRE	D			
	1	Υ	N	Υ	N		DD	IP	PF	F	CR	
	FLOOR PLAN											
1.	Floor Drains Shown in All Ancillary Rooms							X	X	X	X	
2.	Fire Hose Cabinets Shown					- A		х	x	x	X	
3.	Access Hatches, Louvers, Dampers, Knock-out Panels Detailed							X	X	x	X	
4.	Columns at Stair Escalators, Mezzanine to Platform: Size and Clearance Checked							X	X	X	X	
5.	Layout Per General Plans and Standard and Directive Drawings							x	х	X	X	
6.	Mezzanine and Platform Per Standard and Directive Drawings							х	X	х	X	
7.	Change of Materials, Depressed Areas and Slopes Detailed							x	x	x	X	
8.	Access for Removal of Equipment from Mechanical Rooms for Repair							х	х	X	X	
9.	Dampers in Ancillary Room Walls Coordinated with Mechanical Drawings					*			х	x	x	
10.	3-Hour Fire-Rated Removable Panel Between Incoming Electrical Service Room and TPSS								х	х	x	
11.	Room Names and Numbers Completely Filled In								х	х	X	

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DESIGN CHECKLIST

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ARCHITECTURAL ITEMS		СН	D?	ок	?	NOTES	REC	UIRE	D		
		Υ	N	Υ	N		DD	IP	PF	F	CR
12. Door Numbers Completely Filled In. Fire Ration Doors and Walls Shown in Schedules.	ngs of								х	х	х
13. Column Sizes within Preferred Maximum Size	1								x	х	х
14. Equipment Bases Shown and Dimensioned									х	х	х
15. Penetrations Through Fire Rated Walls									х	х	х
16. Emergency Exit Stairs from Mezzanine: 3 ft. Wide with Single Door	8 in.								x	x	х
17. Ancillary Rooms Identified									х	X	х
18. Anti-Slide Devices on Edge Strips Adjacent to Entrance and Escalators)								х	x	х
19. Sizes and Dimensions of Passage Rooms Not	ed								х	х	х
LIGHTING AND REFLECTED CEILING PLAN	S										
1. Platform Height Above Top of Rail Shown								х	х	х	х
2. Lighting Fixtures Shown								х	х	х	Х
3. Mounting Details for Light Fixtures									х	х	х
4. Lighting Fixtures Mounted Over Stairs and Escalators									х	x	x
5. Emergency Lighting Detailed									х	х	х

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DESIGN CHECKLIST

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Proje	ct: Contract No.: Con	tract [*]	Title:			Submittal:		1				
ARCHITECTURAL ITEMS		СН	D?	ок	?	NOTES	REO	REQUIRED				
		Υ	N	Υ	Z		DD	IP	PF	F	CR	
6.	Furred Walls and Ceilings Only at Mezzanine Finished Areas								Х	Х	X	
	STAIRS, ESCALATORS AND ELEVATORS: PLANS, SECTIONS, DETAILS											
1.	Elevators Shown at Platforms, Mezzanine and Stair Landings						x	X	X	х	X	
2.	Layout Dimensions, Horizontal and Vertical Clearances Detailed							X	X	x	X	
3.	Surface Elevator Housing: Canopy at Entrance							х	X	х	X	
4.	Handrail Heights at Mezzanine, Landing, Column, Stair, Escalator Shown								X	X	X	
5.	Number of Riser to Landing, Riser Heights Shown								х	х	X	
6.	Materials Identified								х	х	X	
	DETAILS											
1.	Finish Ceiling Detail Allows Methane Gas to be Vented							Х	Х	X	Х	
2.	Platform Edge Strip								х	x	X	
3.	Finish Ceiling Material Securely Fastened to Structure								X	x	X	

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DESIGN CHECKLIST

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Project: Contract No.:	Con	tract '	Title:	<u> </u>	-	Submittal:		_ Dat	te		1		
ARCHITECTURAL ITEMS		СН	D?	ок	?	NOTES	REC	UIRE	D				
		Υ	N	Υ	N		DD	IP	PF	F	CR		
DOORS													
1. Louvers in Fire-Rated Doors								х	х	х	х		
 Door Schedule (Types, Sizes, Special Equality Alarm, Card Key, Gasket) 	uipment								х	х	х		
3. Hardware Schedule									х	х	х		
EQUIPMENT MOUNTING DETAILS	3												
1. Fare Collection									х	х	х		
2. Maps									х	х	х		
3. Phone Booths									х	х	х		
4. Ticket Vendors									х	х	х		
5. Ash and Trash Receptacles									х	х	х		
6. CCTV									х	х	х		
7. Speakers									х	х	х		
8. Signs									х	х	х		
ACOUSTICS						Į2.							
1. Accordance with System Design Criteria								х	х	х	х		
ACCESSIBILITY FOR THE PHYSICALLY CHA	ALLENGED												
1. Signage Accessible							х	х	х	х	х		
		-											

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DESIGN CHECKLIST

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Proje	ct: Contract No.:	Cont	ract [*]	Title:			Submittal:		_ Dat	te	1	1
AR	CHITECTURAL ITEMS		СН	D?	ок	?	NOTES	REC	UIRE	D		
			Υ	N	Υ	Z		DD	IP	PF	F	CR
2.	Height for Knobs, Switches, Counters, Etc).						Х	X	х	Х	Х
3.	Audio and Braille Included							х	X	X	x	х
4.	Toilet Room Layout							Х	X	х	х	х
5.	Ramps, Curb Cuts								х	х	х	х
6.	Signage for Elevators, Escalators, Exits								X	х	х	х
7.	Wheel Chair Access to Public Facilities								Х	х	х	х
8.	Door Openings Sized								X	х	х	х
9.	Telephones									х	x	х
10.	Safe Area of Refuge									х	х	х
	GRAPHICS AND SIGNAGE											
1.	Procured By and Installed By Noted									х	х	х
2.	Lighting Detailed Where Applicable									х	х	х
3.	Backing Details Shown for Mounting									х	Х	х
4.	Supports Shown									х	х	х
	LANDSCAPING	_										
(TB	D)							х	х	х	х	х
					1			х	х	х	х	х

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DESIGN CHECKLIST

MECHANICAL ITEMS

DESIGN CHECKLIST

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Project:	Contract No.: Cont	tract	Title:			Submittal:		_ Dat	ө	1	1
MECI	HANICAL ITEMS	СН	'D?	ок	?	NOTES	REC	UIRE	D		
		Υ	N	Υ	Z		DD	IP	PF	F	CR
	DRAWINGS - GENERAL ITEMS										
1.	Accuracy, Consistency, and Adequacy of Dimensions						х	X	X	x	X
2.	Column, Reference Points and Match Lines Consistent						х	X	X	x	X
3.							х	X	x	х	X
4.	Consultant Identification						х	X	x	х	X
5.	Contract Number						х	х	х	х	X
6.	Correct Symbols from Legend						Х	х	х	x	X
7.	Cross Reference and Layout Index						х	х	х	x	X
8.	Date						х	х	х	х	X
9.	Drawing Numbers, Sheet Numbers, Revision Numbers - Shown in Order						х	х	х	х	х
10.	Grammar						х	х	х	x	X
11.	Index Sheets - Titles and Numbers						х	х	х	X	X
12.	Meets Design Criteria						х	х	х	х	х
13.							х	х	х	х	х
14	North Arrow Direction						x	x	x	x	x

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DESIGN CHECKLIST

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Project:	Contract No.:	_ Contract	Title:	-		Submittal:		Date/_/						
MECH	HANICAL ITEMS	СН	'D?	ок	?	NOTES	REC	UIRE	Đ					
		Y	N	Υ	N		DD	IP	PF	F	CR			
15.	Proper Orientation of Plans, Sections, and Elevations						х	х	х	х	х			
16.	Room Numbers Consistent for Set						х	х	х	х	х			
17.	Scale and Graphics Scale						x	х	х	х	х			
18.	Spelling						х	х	х	х	х			
19.	Title Block Format						x	х	х	х	х			
20.	Coordination with Other Contracts	3100						х	х	х	х			
21.	Criteria Conformance Checklist							х	х	х	х			
22.	Interface with Other Disciplines	*						х	х	х	x			
23.	Match Line Location Coordinates							х	х	х	х			
24.	Standard Drawings Referenced							х	х	х	х			
25.	Discipline Drawings Referenced								х	х	х			
26.	Freedom from Interferences								х	х	х			
27.	Third Party Requirements Included								х	х	x			
28.	Work Space and Access Space					8			х	х	х			
29.	Referencing Completed									х	х			
30.	Resolution of Design Review Comments									х	х			
31.	Signatures (Including P.E. Stamps)										х			

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DESIGN CHECKLIST

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MECI	HANICAL ITEMS	СН	D?	ок	?	NOTES	REO	UIRE	D		
		Υ	N	Υ	N		DD	IP	PF	F	CR
	MECHANICAL ITEMS										
1.	Outside Air Intakes						х	X	X	х	х
2.	Space Allocation for Equipment and Fixtures						х	X	X	х	X
3.							х	X	х	х	х
4.	Sewer Line, Routing						х	X	х	х	х
5.	Fan Shaft Locations Configurations and Acoustics						х	X	х	х	х
6.	Dampers to Electrical Rooms							х	х	х	х
7.	Fire Protection Systems, General Arrangement							х	х	х	х
8.	Location of Sewage Ejector							X	х	х	X
9.	Location & Details of Sump Pumps							х	х	х	х
10.	Piping Arrangements Shown							х	х	х	х
11.	HVAC Code Search							х	х	х	X
12.	Comments from Preliminary Review Incorporated							х	x	х	X
13.	Insulation of Pipes							х	х	х	х
14.	14. Coordination with Other Disciplines							х	х	х	х
15.	Sprinkler System Coverage							х	х	х	х
16.	Compliance with Drafting Standards and Design Criteria					*		x	х	х	х

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DESIGN CHECKLIST

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MEC	HANICAL ITEMS	СН	D?	ок	.7	NOTES	REO	UIRE	D		
		Υ	N	Υ	N		DD	IP	PF	F	CR
17.	Thermostats for Fans in Elevator Machine Rooms							Х	Х	Х	X
18.	Space Heaters							х	х	х	х
19.	Locations of Lift Stations (Drainage)							х	х	х	х
20.	Spacing of Drains							х	х	х	Х
21.	General Routing of Pipes							х	х	х	Х
22.	General Routing of Ducts							х	х	х	х
23.	Fire Alarms Shown							х	х	х	х
···	a. Smoke							х	х	х	Х
	b. Heat Detector System							х	х	х	Х
	c. Fixture Locations							х	х	х	х
24.	Comments from Previous Review Incorporated							х	х	х	х
25.	Sprinkler System Details								х	х	Х
26.	Critical Invert Elevation and Slopes Shown								х	х	х
27.	Mechanical Room Layout Access Hatches and/or Doors								X	х	х
28.	Locations of Diffuser - Grilles								х	х	х
29.	Fire Hose Locations								х	х	х
30.	Plumbing and Drainage Schedules of Equipment, Fixtures & Fittings					В			х	х	х

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DESIGN CHECKLIST

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Project:	Contract No.: (Contract Title: Submitta				Submittal:	al: Date/					
MECH	IANICAL ITEMS	СН	'D?	ок	?	NOTES	REC	UIRE	D			
		Υ	N	Υ	N		DD	IP	PF	F	CR	
31.	Pipe Thrust Blocks								х	Х	Х	
32.	Thermostat Locations								х	X.	х	
33.	Firestat Locations in Ducts					9			х	х	х	
34.	Fire and Smoke Damper Schedules								х	х	х	
35.	Design Report and Calculations, Complete and Checked								х	х	x	
36.	Corrosion Controls Details								х	х	х	
37.	Spacing for Proper Maintenance and Parts Replacement	la .							х	х	х	
38.	Ticket Vending Machine Stainless Steel Closure Panels								х	х	x	
39.	Battery Room Exhaust System								х	х	х	
40.	Install Insulating Flanges on All Metallic Pipes Immediately Inside Structures								х	x	X	
41.	Corrosion Control Test Boxes Detailed								х	х	х	
42.	Blockouts and Pipe Chases								х	х	х	
43.	Line Air Purging Valve Locations and Vacuum Breakers Shown								x	x	x	
44.	Access to the Equipment Clear from Details								х	х	х	
45.	Sewer Line, Cleanouts, Venting Noted								х	х	х	

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DESIGN CHECKLIST

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Project: Contract No.: Contract		ract Title:				Submittal:		Date			
MECI	HANICAL ITEMS	CH	D?	ок	?	NOTES	REC				
		Υ	N	Υ	N		DD	IP	PF	F	CR
46.	Diffuser - Grille Sizes and Air CFM Noted on Schedules								х	х	Х
47.	Duct Sizes Noted								х	х	х
48.	Schedules of Selected Equipment, Fixtures and Fittings								х	x	х
49.	Pipe Supports and Anchors								х	х	х
50.	Pipe Sizes Detailed							ij.	х	х	х
51.	Calculations for Air Conditioning and Ventilation Equipment								х	х	х
52.	Line Drain Valve Locations								х	х	х
53.	Fire Cabinet Locations								х	х	х
54.	Access Panels								х	х	х
55.	Air Conditioning Control								х	х	х
	a. Fire Protection							х	х	х	Х
	b. Air Flow schematic Diagram								х	х	Х
56.	Drawings, All Systems, Detailed and Complete									х	х
57.	Specifications Cross Referenced									х	Х
58.	Coordination, Drawings - Specifications, Complete					B				х	Х
59.	A/C and Ventilation Systems Dimensioned									х	Х

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DESIGN CHECKLIST

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MEC	HANICAL ITEMS	CH'I	D?	ок	?	NOTES	REC	UIRE	Đ		
		Y	N	Υ	N		DD	IP	PF	F	CR
60.	Referencing Completed									Х	Х
	a. Control Schematic									х	х
	b. Operation Sequence									х	х
61.	List of Bid Items								2	х	х

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DESIGN CHECKLIST

ELECTRICAL ITEMS

DESIGN CHECKLIST

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		tract	Title:			Date/_/					
ELEC	TRICAL ITEMS	СН	'D?	ок	?	NOTES	REC	UIRE	D		
	Ψ	Υ	N	Υ	N		DD	IP	PF	F	CR
	DRAWINGS - GENERAL ITEMS										
1.	Accuracy, Consistency, and Adequacy of Dimensions						х	x	Х	x	x
2.	Column, Reference Points and Match Lines Consistent						х	х	х	х	х
3.	Compliance with Applicable Codes and Standards			-			х	х	х	х	х
4.	Consultant Identification						х	х	х	х	X
5.	Contract Number						х	х	х	х	X
6.	Correct Symbols from Legend						х	х	х	х	х
7.	Cross Reference and Layout Index						х	х	х	х	х
8.	Date						х	х	х	х	х
9.	Drawing Numbers, Sheet Numbers, Revision Numbers - Shown in Order						х	х	х	х	х
10.	Grammar						х	х	х	х	Х
11.	Index Sheets - Titles and Numbers						х	х	х	х	х
12.	Meets Design Criteria					÷	х	х	х	х	х
13.	Meets Drafting Criteria (Letter Sizes)						х	х	х	х	х
14.	North Arrow Direction						х	х	х	х	х

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ELEC	TRICAL ITEMS		CH'	D?	ок	?	NOTES	REC	UIRE	D			
			Υ	N	Υ	N		DD	IP	PF	F	CR	
15.	Proper Orientation of Plans, Sections, and Elevations							х	х	х	х	х	
16.	Room Numbers Consistent for Set							х	х	х	х	х	
17.	Scale and Graphics Scale							х	х	х	х	х	
18.	Spelling							х	х	х	х	х	
19.	Title Block Format							х	х	х	х	х	
20.	Coordination with Other Contracts								х	х	х	х	
21.	Criteria Conformance Checklist								х	х	х	х	
22.	Interface Requirements								х	х	х	х	
23.	Match Line Location Coordinates								х	х	х	х	
24.	Standard Drawings Referenced			•					х	х	х	х	
25.	Discipline Drawings Referenced									х	х	х	
26.	Freedom from Interferences									х	х	X	
27.	Third Party Requirements Included									х	х	х	
28.	Work Space and Access Space									х	х	х	
29.	Referencing Completed										х	х	
30.	Resolution of Design Review Comments										х	х	
31.	Signatures (Including P.E. Stamps)											х	

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DESIGN CHECKLIST

Review	er: Organization	:				Discipline:	s	heet _	3	_ of	_9_
Project:	Contract No.: Co	ntract	Title:			Submittal:		_ Dat	e	1	1
ELEC	TRICAL ITEMS	СН	'n?	OK?		NOTES	REC	UIRE	D		
		Υ	N	Υ	2		DD	IP	PF	F	CR
LIGH	ITING, POWER GROUNDING & CONTROLS DWGS										le)
1. Lighting							x	Х	х	х	х
	a. Interior Location and Circuit						х	х	х	х	х
	b. Interior Schematic & Fixture Schedules							х	х	х	х
	c. Exterior Location and Schematic						х	х	х	х	х
	d. Exterior Schematic & Fixture Schedule							х	х	х	х
2.	One-Line Diagram						х	х	х	х	х
	a. Essential and Non-Essential Load Identified						х	х	х	х	х
	b. Distribution Plan					ē	х	х	х	х	х
	c. Control and Transfer Features								х	х	х
	d. Power Requirements for A-G & A Line and Subway Sections							х	х	x	х
	e. Completeness									х	х
3.	Lighting Protection and Obstruction for Towers, Stacks						х	х	х	х	х
4.	Grade and Aerial Line Section Duct Banks:						х	х	х	х	х
5. General Notes							х	х	х	х	х
6.							х	х	х	х	х

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DESIGN CHECKLIST

Review	er: Organization:					Discipline:	s	heet _	4	of	_9_
Project	Contract No.: Con	tract	Title:			Submittal:	Submittal: Date/			1	1
ELEC	TRICAL ITEMS	СН	D?	ок	?	NOTES	REC	UIRE	D		
		Υ	N	Υ	2		DD	IP	PF	F	CR
7.	Outline Specifications						х	X	Х	х	Х
8.	Exit Sign Locations, Verified ADA requirement						х	X	X	х	X
9.	Subway Section Duct Banks						х	X	Х	х	X
	a. Location						х	х	х	х	х
	b. Detailed								х	х	х
10.	Switchgear and Panel Boards Spares and Spaces							х	х	х	х
11.	Emergency Lighting Fixtures:							х	х	х	х
	a. Location							х	х	х	х
	b. Circuitry							х	х	x	X
12.	Ground System:							х	х	х	х
	a. Plan & Details of Rods, cable, Connectors								х	х	х
	b. Grounding Plates and Buses for Electrical Rooms								х	X	X
	c. Grounding for Train Control Room.							X	х	X	Х
13.	13. Grounding Provision for Receptacles and Lighting Fixtures							X	х	X	X
14.	Elementary Wiring and Block Diagrams							х	х	х	х
	a. HVAC							х	х	Х	Х

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DESIGN CHECKLIST

Reviewe	er: Organization	on:				Discipline:		SI	heet _	5	_ of	_9
Project:	Contract No.: C	Contract	Title:	·			Submittal:		_ Dat	te	1	1
ELEC.	TRICAL ITEMS	СН	ľD?	ок	?	NOTES		REQ	UIRE	D		
		Υ	N	Υ	N			DD	IP	PF	F	CR
	b. Pump Station								Х	Х	Х	Х
	c. Station Entrance Control									х	х	х
15.	Panel Schedules								х	х	х	х
16.	Conduit and Station Raceway Schedules								х	х	х	х
17.	Motor Control Center, Switchboard Schedules Information								х	х	х	x
18.	Receptacle Layout and Circuitry								х	х	х	х
19.	Battery Disconnect Switches								х	х	х	х
20.	Panels Between Fan Room and Shafts								х	х	х	х
21.	Conduit Continuity, Drawing to Drawing								х	х	х	х
22.	Standard Drawings Properly Referenced								х	х	х	Х
23.	Comments from Previous Review Incorporated								х	х	х	х
24.	Control Block Diagrams Coordinated with Condui Schedules	t							х	х	x	х
25.	Incoming Telephone Service in Accordance with Utility								х	х	х	х
26.	Pay Telephone Requirements/Locations		_						х	х	х	х
27.	Cable Sizing, Short-Circuit, Voltage Drops, Load Flow Analysis:								x	х	х	X

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DESIGN CHECKLIST

Review	er: Organization:					Discipline:	s	heet _	6	of	_9
Project:	Contract No.: Cont	tract	Title:	·	-	Submittal:		_ Dat	е	1	1
ELEC	TRICAL ITEMS	СН	'n?	ОК	?	NOTES	REC	UIRE	D		
		Υ	N	Υ	N		DD	IP	PF	F	CR
	a. Calculations							Х	Х	Х	X
	b. Equipment Adequately Sized and Braced								х	х	X
28.	Incoming Power Service in Accordance with Utility							X	X	х	x
29.	Cathodic Protection System; Bonding							х	х	х	х
30.	D. Conduit Run Shown Clearly on Cable Schedule							х	х	х	х
31.	Conduit Size Verified on the Raceway Schedule							Х	х	х	Х
32.	Conduit Bends Shown in Accordance with NFPA- 70, or as Specified on Contract Drawing/Specification					6		X	x	x	X
33.	Standard Conduit Bends Shown in Accordance with NEC Table 346-10, or as Specified on Contract Drawing/Specification							x	x	х	X
34.	Exposed Portion of Conduits Shown Galvanized Rigid Steel (GRS) and Embedded Portion of Conduits shown PVC, unless otherwise specified by Contract Drawing/Specification							х	х	x	х
35.	Grounding Size Shown on the Drawing Match with the Grounding Riser Diagram							х	x	х	x
36.	For Location and Installation of Public Address (PA) Speakers, Architectural and Electrical Drawing Coordinated.							X	x	x	х

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DESIGN CHECKLIST

Reviewe	er: Organization:		-	/		Discipline:	s	heet _	7_	of	9
Project:	Contract No.: Cont	tract	Title:			Submittal:		_ Dat	e		1
ELEC	TRICAL ITEMS	СН	D?	ок	?	NOTES	REC	UIRE	D		
		Υ	N	Υ	N		DD	IP	PF	F	CR
37.	Pull box sized in accordance with NEC Article 370-28 or as Indicated on Drawings/Specification							X	X	х	Х
38.	Pull box Mounting Details Checked							х	х	х	X
39.	Fixture Mounting Details provided on the drawing to avoid Obstruction with HVAC duct and other Electrical Installation								x	x	X
40.	UPS System Adequately Sized and Proper Clearance Maintained for Air Circulation								X	х	x
41.	Cathodic Protection System; Anodes & Circuit								X	х	X
42.	Conduits Clear of Reinforcing Steel, Ect.								X	х	Х
43.	Conduits Clearance, Size Checked and Spares Included								X	х	X
44.	Escalator Interface Details								х	х	X
45.	Interface Between Disciplines, Compliance								х	X	X
46.	Referencing Completed								Х	х	X
47.	Lights in Stairwells								х	х	X
48.	Design Report and Calculations Complete and Checked								X	X	X
49.	List of Bid Items								х	х	х
50.	Specifications Completed (Technical)							=	х	х	X

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DESIGN CHECKLIST

Reviewe	er: Organization:					Discipline:	s	heet .	8_	_ of	_9_
Project:	Contract No.: Con-	tract	Title:			Submittal:	Submittal: Date/				
ELEC.	TRICAL ITEMS	СН	D?	ок	?	NOTES	REC	UIRE	D		
			N	Υ	N		DD	IP	PF	F	CR
51.	Feeder Sizes with Respect to Load and Voltage Drop								х	х	х
52.	Transformer Sizes and Spare Capacity								х	х	х
53.	Elevator Interface Details								х	х	х
54.	Electrical Room Size (Dimensions)							1,000	х	х	х
55.	Clearances (Working Space, Overhead, Drawout)								х	х	х
56.	6. Removal Access for Electrical Equipment:								х	х	х
	a. Primary Swtichgear and Transformer								х	х	х
	b. Secondary Switchboard and MCC's								х	х	х
	c. Emergency System Equipment								х	х	х
57.	Entrance and Area Lightings, Lighted Graphics								х	х	х
58.	Lighting Calculation (Title 24)								х	х	х
59.	Remote Controls of Exterior, Public Area Lighting								х	х	х
60.	All Checking Completed; Drawings Signed and Sealed									х	х
61.	Drawings, All Systems Detailed and Completed									х	Х
62.	Coordination Between Drawings and Specs, Complete									х	x
63.	Relay Setting and Coordination Verified									х	х

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DESIGN CHECKLIST

Reviewer:		rganization:				Discipline:	{	Sheet	9_	_ of	_9_
Project:	Contract No.:	Contract	Title:			Submittal:		_ Da	te	1	1
ELECTRICAL ITEMS		CH	D?	ок	?	NOTES	RE	QUIR	ED		
		Υ	N	Υ	N		DD	IP	PF	F	CR
64. Proper Grounding	System Provided									Х	Х

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DESIGN CHECKLIST

ELEVATORS & ESCALATORS

DESIGN CHECKLIST

Review	Reviewer: Organization: _		Discipline:						Sheet _1_ of					
Project:	Contract No.: Contract No.:	tract	ract Title:			Submittal:		_ Dat	e	1	1			
ELEV	ATORS AND ESCALATORS	СН	D?	OK? NO		NOTES	REO							
		Υ	N	Υ	N		DD	IP	PF	F	CR			
	DRAWINGS - GENERAL ITEMS													
1.	Accuracy, Consistency, and Adequacy of Dimensions					*	x	X	х	X.	х			
2.	Column, Reference Points and Match Lines Consistent						x	x	х	x	х			
3.	Compliance with Applicable Codes and Standards						х	X	х	х	X			
4.	Consultant Identification						х	X	Х	х	X			
5.	Contract Number						х	X	X	х	X			
6.	Correct Symbols from Legend						х	х	х	x	X			
7.	Cross Reference and Layout Index						х	X	х	х	X			
8.	Date						х	Х	х	X	X			
9.	Drawing Numbers, Sheet Numbers, Revision Numbers - Shown in Order						х	x	х	х	x			
10.	Grammar						х	Х	х	х	х			
11.	Index Sheets - Titles and Numbers				e e		X	X	X	Х	X			
12.	Meets Design Criteria						x	x	х	х	X			
13.	Meets Drafting Criteria (Letter Sizes)						х	х	х	х	х			
14.	North Arrow Direction						х	х	х	х	х			

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ELEVATORS AND ESCALATORS 1 of 3

DESIGN CHECKLIST

Review	er: Organization	Organization:					_ Discipline:			Sheet2				
Project:	Contract No.: Contract No.:	Contract Title:					Submittal:		_ Dat	е	1	1		
ELEV	ELEVATORS AND ESCALATORS		CH'D?		?	NOTES		REC	UIRE	D				
		Υ	N	Υ	N			DD	IP	PF	F	CR		
15.	Proper Orientation of Plans, Sections, and Elevations							х	х	Х	х	Х		
16.	Room Numbers Consistent for Set							х	Х	х	х	х		
17.	Scale and Graphics Scale							х	х	х	х	х		
18.	Spelling							х	х	х	х	х		
19.	Title Block Format							х	Х	х	х	х		
20.	Coordination with Other Contracts								X	х	х	х		
21.	Criteria Conformance Checklist								х	х	х	х		
22.	Interface with Other Disciplines								Х	х	х	х		
23.	Match Line Location Coordinates								Х	х	х	х		
24.	Standard Drawings Referenced								X	х	х	х		
25.	Discipline Drawings Referenced									х	х	х		
26.	Freedom from Interferences									х	х	х		
27.	Third Party Requirements Included									х	х	х		
28.	Work Space and Access Space									х	х	Х		
29.	Referencing Completed										х	х		
30.	Resolution of Design Review Comments	35					8				х	х		
31.	Signatures (Including P.E. Stamps)											x		

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ELEVATORS AND ESCALATORS 2 of 3

DESIGN CHECKLIST

Review	er: Organization:					Discipline:	s	heet	3_	_ of	_3_
Project:	Contract No.: Con	tract	Title:			Submittal:		_ Da	te		1
ELEV	ATORS AND ESCALATORS	СН	'D?	ОК	?	NOTES	REC	UIRE	:D		
		Υ	N	Υ	N		DD	IP	PF	F	CR
	ELEVATORS AND ESCALATORS ITEMS										enus —
1.	Elevator Platform Plan						х	х	х	х	х
2.	Escalator Configuration						х	х	х	х	х
3.	Elevator Tabulation						х	х	x	х	х
4.	Elevator Electrical Interface							х	х	х	х
5.	Escalator Tabulation							х	х	х	х
6.	Escalator Electrical Interface							х	х	х	х
7.	Elevator Hoistway Doors								х	X.	х
8.	Escalator Cladding								х	х	х

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ELEVATORS AND ESCALATORS 3 of 3

DESIGN CHECKLIST

COMMUNICATION INSTALLATION AND GAS MONITORING/SEISMIC DETECTION PROCUREMENT

DESIGN CHECKLIST

Review	er: Organization:					Discipline:	s	heet _	1_	of	6_				
Project	roject: Contract No.: Con			ract Title: Submittal:					Date / _ /						
300.4444.000.0404.000	COMMUNICATIONS INSTALLATION AND GAS		CH'D? OK?		?	NOTES	REC								
MONITORING/SEISMIC DETECTION PROCUREMENT		Υ	N	Υ	N		DD	IP	PF	F	CR				
	DRAWINGS - GENERAL ITEMS														
1.	Accuracy, Consistency, and Adequacy of Dimensions						х	x	х	х	x				
2.	Column, Reference Points and Match Lines Consistent						х	х	х	х	x				
3.	Compliance with Applicable Codes and Standards						х	х	х	х	х				
4.	Consultant Identification						х	Х	х	х	X				
5.	Contract Number						х	х	х	х	х				
6.	Correct Symbols from Legend						х	х	х	х	х				
7.	Cross Reference and Layout Index						х	х	х	х	X				
8.	Date						х	х	х	х	х				
9.	Drawing Numbers, Sheet Numbers, Revision Numbers - Shown in Order						х	X	х	х	х				
10.	Grammar						х	Х	х	х	Х				
11.	Index Sheets - Titles and Numbers						x	X	Х	Х	X				
12.	Meets Design Criteria						х	Х	х	х	X				
13.	Meets Drafting Criteria (Letter Sizes)						х	х	х	х	X				
14.	North Arrow Direction						х	Х	х	Х	Х				

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COMM.INSTALLATION AND GAS MONITORING/SEISMIC DETECTION PROCUREMENT 1 of 6

DESIGN CHECKLIST

Review	er: Organizat	tion:				Discipline:	s	heet	2	_ of	_6_	
Project:	Contract No.:	Contract	Title:			Submittal:		_ Dat	te	1		
	MUNICATIONS INSTALLATION AND GAS	СН	D?	ок	?	NOTES	REC	UIRE	D			
MUN	ITORING/SEISMIC DETECTION PROCUREMENT	Υ	N	Υ	N		DD	IP	PF	F	CR	
15.	Proper Orientation of Plans, Sections, and Elevations						х	х	х	х	X	
16.	Room Numbers Consistent for Set						х	х	х	х	X	
17.	Scale and Graphics Scale						х	х	х	х	Х	
18.	Spelling						х	х	х	х	Х	
19.	Title Block Format						х	х	х	х	х	
20.	Coordination with Other Contracts							х	х	х	х	
21.	Criteria Conformance Checklist							х	х	х	х	
22.	Interface with Other Disciplines							х	х	X	х	
23.	Match Line Location Coordinates							х	х	х	х	
24.	Standard Drawings Referenced							х	х	х	х	
25.	Discipline Drawings Referenced								х	х	х	
26.	Freedom from Interferences								х	х	х	
27.	Third Party Requirements Included								х	х	X	
28.	Work Space and Access Space								х	х	х	
29.	Referencing Completed									х	х	
30.	Resolution of Design Review Comments									х	Х	
31.	Signatures (Including P.E. Stamps)										х	

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COMM.INSTALLATION AND GAS MONITORING/SEISMIC DETECTION PROCUREMENT 2 of 6

DESIGN CHECKLIST

Reviewe	r:	Organizati	on:				Discipline:	s	heet _	3_	of	_6_	
Project: Contract No.:		Contract No.: (Contract	Title:			Submittal:		Date/_/				
COMMUNICATIONS INSTALLATION AND GAS		СН	'D?	ок	?	NOTES	REC						
MONI	IORIN	G/SEISMIC DETECTION PROCUREMENT	Y	N	Υ	N		DD	IP	PF	F	CR	
G	ENER	AL SYSTEM WIDE COMMUNICATIONS											
1.	Gas N Install	Nonitoring System Procurement and lation						х	x	х	x	X	
	a.	Wiring								х	х	х	
	b.	Location of Detectors								х	х	х	
2.		nic Detection (at selected stations) rement and Installation						х	х	х	х	х	
	a.	Wiring								х	х	х	
	b.	Location of Seismic Switches								х	х	х	
3.	Tunne	el and Line Section Construction						х	x	х	х	х	
	a.	Cable Routing							X	х	x	X	
	b.	Blockouts							х	х	x	X	
	C.	Cross Passage Communications Interface Cabinet							х	х	X	х	
4.	Statio	n Construction						Х	X	х	Х	X	
	a.	Cable trays and embedded conduits							х	х	х	х	
	b.	Uninterruptable Power Supply Distribution	n						х	х	х	х	
	c.	Communication Interface Cabinets							х	х	х	х	
	d.	Blockouts							х	х	х	х	

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DESIGN CHECKLIST

Reviewe	er: Organization:		3.		Discipline:				Sheet <u>4</u> of _					
Project:	Contract No.: Con	tract	Title:			Submittal:		_ Dat	te		1			
	MUNICATIONS INSTALLATION AND GAS ITORING/SEISMIC DETECTION PROCUREMENT	СН	'D?	ОК	?	NOTES	REQUIRED							
WICH	TORING/SEISMIC DETECTION PROCUREMENT	Υ	N	Υ	N		DD	IP	PF	F	CR			
5.	Integration with Existing Operating Segment						Х	Х	Х	Х	Х			
	a. Main Distribution Frames							х	х	х	х			
	b. Uninterruptable Power Supply Distribution							х	х	х	х			
6.	System Installation Block Diagrams							х	х	х	х			
7.	Raceway/Trench Duct/Cable Trays/Conduits Locations							х	х	х	х			
	RADIO SYSTEM						х	х	х	х	х			
1.	Seismic Bracing							х	х	х	х			
2.	Uninterruptable Power Supply Distribution								х	х	х			
3.	Main Distribution Frame Cross Connections								х	х	х			
	PUBLIC ADDRESS SYSTEM						х	х	х	х	х			
1.	Seismic Bracing							Х	х	х	х			
2.	Uninterruptable Power Supply Distribution								х	х	х			
3.	Equipment Installation								х	х	х			
4.	Speaker Cabling								х	х	х			
С	LOSED CIRCUIT TELEVISION (CCTV) SYSTEM						х	х	х	х	х			
1.	Seismic Bracing						2000	х	х	х	х			
2.	Uninterruptable Power Supply Distribution								х	х	х			

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DESIGN CHECKLIST

Review	rer: Organization:					Discipline:	s	heet	_5_	_ of	_6_
Project: Contract No.: Contract		tract	Title:			Submittal:		_ Da	te	1	1
2+111	IMUNICATIONS INSTALLATION AND GAS	СН	D?	ок	?	NOTES	REC	UIRE			
MON	IITORING/SEISMIC DETECTION PROCUREMENT	Υ	N	Υ	N		DD	IP	PF	F	CR
3.	Equipment Installation								Х	Х	Х
4.	Camera Cabling								х	х	х
FIBI	ER OPTIC & CABLE TRANSMISSION (FO&CT) SYSTEM						х	х	х	х	х
1.	Seismic Bracing							х	х	х	х
2.	Main Distribution Frame Cross Connections								х	х	х
3.	Equipment Installation								х	х	х
50	TRANSIT AUTOMATIC CONTROLS & SCADA (TRACS) SYSTEM						х	х	х	х	x
1.	Seismic Bracing							х	х	х	х
2.	Main Distribution Frame Cross Connections								х	х	х
3.	Uninterruptable Power Supply Distribution								х	х	х
	FIRE AND EMERGENCY MANAGEMENT (F&EM) SYSTEM						х	х	х	х	х
1.	Seismic Bracing							х	х	х	х
2.	Equipment Installation								х	х	х
3.	Field Device Cabling								х	х	х
4.	Uninterruptable Power Supply Distribution								х	х	х
,	AUTOMATIC TRAIN CONTROL (ATC) SYSTEM						х	х	х	х	х
1.	Out of Plant Cabling							х	х	х	х

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COMM.INSTALLATION AND GAS MONITORING/SEISMIC DETECTION PROCUREMENT 5 of 6

DESIGN CHECKLIST

Review	er: Organiza	tion:				Discipline:	s	heet	_6	_ of	6_	
Project:	Contract No.:	Contract	Title:			Submittal:		_ Da	te	1	1	
	MUNICATIONS INSTALLATION AND GAS ITORING/SEISMIC DETECTION PROCUREMENT	СН	CH'D? OK? NOTES				REQUIRED					
		Y	N	Υ	N		DD	IP	PF	F	CR	
2.	Main Distribution Frame Cross Connections								Х	Х	Х	
	TRACTION POWER SYSTEM						х	х	х	х	X	
1.	Transfer Trip Cabling								х	х	х	
2.	Main Distribution Frames								х	х	х	
	VARIABLE MESSAGE SIGN (VMS) SYSTEM						х	х	х	х	х	
1.	Seismic Bracing							х	х	х	х	
2.	Uninterruptable Power Supply Distribution								х	х	х	
3.	Equipment Installation								х	х	х	
4.	Sign Cabling								х	х	х	
	ESCALATORS AND ELEVATORS SYSTEM						х	х	х	х	х	
1.	Communications Interface Cabling								х	х	х	
2.	Main Distribution Frame Cross Connections								х	х	Х	
	TELEPHONE SYSTEM						х	х	х	х	Х	
1.	Seismic Bracing							х	х	х	Х	
2.	Device Cabling								х	х	х	
	FARE COLLECTION SYSTEM						х	х	х	х	х	
1.	Communications Interface Cabling								х	х	х	
2.	Main Distribution Frames								х	х	х	

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COMM.INSTALLATION AND GAS MONITORING/SEISMIC DETECTION PROCUREMENT 6 of 6

CORROSION CONTROL ITEMS

DESIGN CHECKLIST

Reviewer: Organiz		ation:				Discipline:	\$	Sheet <u>1</u> of				
Proje	ct: Contract No.: Co	ntract	Title:	-		Submittal:		_ Da	te	1		
СО	RROSION CONTROL ITEMS	СН	'D?	ок	?	NOTES	REC	UIRE	D			
		Υ	N	Υ	Z		DD	IP	PF	F	CR	
	DRAWINGS - GENERAL ITEMS											
1.	Accuracy, Consistency, and Adequacy of Dimensions						х	х	х	х	х	
2.	Column, Reference Points and Match Lines Consistent						х	х	х	х	х	
3.	Compliance with Applicable Codes and Standards						х	х	х	х	х	
4.	Consultant Identification						х	х	х	х	х	
5.	Contract Number						х	х	х	Х	Х	
6.	Correct Symbols from Legend						х	х	х	х	X	
7.	Cross Reference and Layout Index						х	х	х	х	х	
8.	Date						х	х	х	х	х	
9.	Drawing Numbers, Sheet Numbers, Revision Numbers - Shown in Order						х	х	х	х	х	
10.	Grammar						х	х	х	х	х	
11.	Index Sheets - Titles and Numbers					2	х	х	х	х	х	
12.	Meets Design Criteria						х	х	х	х	х	
13.	Meets Drafting Criteria (Letter Sizes)						х	х	х	х	х	
14.	North Arrow Direction						х	х	х	х	x	

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CORROSION 1 of 4

DESIGN CHECKLIST

Reviewer:	Orga	nization: _					Discipline:	**************************************	Shee	t <u>2</u>	_ of	_4
Project:	Contract No.:	Conti	act '	Title:			Sı	ıbmittal:	Da	ate		1
CORROSION CON	ITROL ITEMS		СН	D?	ОК	?	NOTES	R	EQUIF	ED		
			Υ	N	Υ	N		DI) IP	PF	F	CR
15. Proper Orient Elevations	ation of Plans, Sections, and							х	X	х	х	х
16. Room Numbe	rs Consistent for Set							х	X	x	х	Х
17. Scale and Gra	aphics Scale							х	X	x	х	X
18. Spelling								х	X	x	х	Х
19. Title Block Fo	rmat							Х	X	x	х	х
20. Coordination	with Other Contracts								х	х	х	х
21. Criteria Confo	ormance Checklist								х	х	х	X
22. Interface with	n Other Disciplines								х	x	х	X
23. Match Line Lo	ocation Coordinates								Х	х	х	х
24. Standard Dra	wings Referenced								х	х	х	х
25. Discipline Dra	wings Referenced									х	х	х
26. Freedom from	n Interferences									х	х	х
27. Third Party R	equirements Included									х	х	х
28. Work Space a	and Access Space									х	х	х
29. Referencing (Completed						y .	78.3			x	х
30. Resolution of	Design Review Comments										х	х
31. Signatures												х

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CORROSION 2 of 4

DESIGN CHECKLIST

Reviewe	r: Organiz	ation:			Discipline:			Sheet <u>3</u> of <u>4</u>						
Project:	Contract No.:	Contract	Title:	-		s	ubmittal:		_ Dat	е	1	_1		
CORR	OSION CONTROL ITEMS	CH	ľD?	ОК	(?	NOTES	F	REQ	UIRE	D				
		Y	N	Υ	N		C	DO	IP	PF	F	CR		
	CORROSION CONTROL ITEMS													
1. Pi	iping													
a.	. Coatings									х	х	х		
b.	Structure Penetrations									х	х	х		
C.	. Isolation									х	х	х		
d.	. Cathodic Protection									х	х	х		
2. El	evators													
a.	Pit Configuration									х	х	х		
b.	Equipment Room									х	х	х		
3. C	ollector Grid													
a.	Rebar Configuration-Tunnels									х	х	х		
b.	Rebar Configuration-Specials (i.e. Stations, Crossovers, Pocket, etc.)									X	х	x		
4. Tr	ackwork													
a.	Direct Fixation Fasteners (all types)									х	х	х		
b.	Tie & Ballast									х	х	х		
c.	Special Track Configuration									x	х	х		
d.	Signals & Traction Power									х	х	х		

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CORROSION 3 of 4

DESIGN CHECKLIST

Revie	wer: _			Organization: _				1015 P. 101	Discipline:	\$	Sheet	_4	_ of	_4
Proje	ct:		Contract No.:	Contra	act '	Title:			Submittal:		_ Dat	te		1
СО	RROS	SION CONTROL	ITEMS		CH	D?	ок	?	NOTES	REC	UIRE	Đ		
					Y	N	Υ	N		DD	IP	PF	F	CR
5.	Brid	ges/Aerials												
	a.	Rebar Configura	tion						ч			х	х	х
	b.	Expansion Joints	S									х	х	х
	c.	Pre/Post Tension	ı Cables									х	х	х
	d.	Bents & Column	s									х	х	х
6.	Cros	ss Passages												
	а.	Testing Facilities	;									х	х	х

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CORROSION 4 of 4

SYSTEMS COMMUNICATION
CLOSED CIRCUIT TELEVISION

DESIGN CHECKLIST

Reviewer: Organization:						Discipline:		s	heet	_1_	_ of	_3_
Project:	Project: Contract No.: Con						Submittal:		_ Da	te	1	1
II .	TEM COMMUNICATION	СН	'D?	ок	.?	NOTES		REC	UIRE	D		
CLOS	SED CIRCUIT TELEVISION	Υ	N	Υ	N			DD	IP	PF	F	CR
	DRAWINGS - GENERAL ITEMS											
1.	Accuracy, Consistency, and Adequacy of Dimensions							х	х	х	х	X
2.	Column, Reference Points and Match Lines Consistent							х	х	х	х	x
3.	Compliance with Applicable Codes and Standards							х	х	х	х	Х
4.	Consultant Identification							х	х	х	х	х
5.	Contract Number							х	х	х	х	х
6.	Correct Symbols from Legend							х	х	х	х	х
7.	Cross Reference and Layout Index							х	х	х	х	х
8.	Date							х	х	х	х	х
9.	Drawing Numbers, Sheet Numbers, Revision Numbers - Shown in Order							х	х	х	х	х
10.	Grammar							х	х	х	х	х
11.	Index Sheets - Titles and Numbers							х	х	х	х	х
12.	Meets Drafting Criteria (Letter Sizes)	<u> </u>						х	х	х	х	х
13.	Meets Design Criteria							х	х	х	х	х
14	North Arrow Direction							Y	¥	Y	Y	Y

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SYSTEM COMMUNICATION CLOSED CIRCUIT TELEVISIONS 1 of 3

DESIGN CHECKLIST

Review	er: Organization:	Organization:				Discipline:	s	heet _	of	_3_	
Project:	Contract No.: Con	tract	Title:			Submittal:		_ Dat	е	1	1
SYSTEM COMMUNICATION		СН	D?	ок	?	NOTES	REQUIRED				
CLOS	SED CIRCUIT TELEVISION	Υ	N	Υ	N		DD	IP	PF	F	CR
15.	Proper Orientation of Plans, Sections, and Elevations						х	х	Х	х	х
16.	Room Numbers Consistent for Set						х	x	x	х	х
17.	Scale and Graphics Scale						х	X	x	х	х
18.	Spelling						х	х	х	х	х
19.	Title Block Format						х	х	x	х	х
20.	Coordination with Other Contracts							X	х	х	х
21.	Criteria Conformance Checklist							х	х	х	х
22.	Interface with Other Disciplines							х	х	х	х
23.	Match Line Location Coordinates							Х	х	х	х
24.	Standard Drawings Referenced							х	х	х	х
25.	Discipline Drawings Referenced								x	х	х
26.	Freedom from Interferences								X	х	х
27.	Third Party Requirements Included								х	х	х
28.	Work Space and Access Space								х	х	х
29.	Referencing Completed									х	х
30.	Resolution of Design Review Comments									х	х
31.	Signatures (Including P.E. Stamps)										х

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SYSTEM COMMUNICATION CLOSED CIRCUIT TELEVISIONS 2 of 3

DESIGN CHECKLIST

Reviev	ver: Organizat	Organization:			Discipline:	Discipline: She				_3_	
Projec	t: Contract No.:	Contract	Title:		···	Submittal:		_ Dat	te	1	
SYSTEM COMMUNICATION CLOSED CIRCUIT TELEVISION		СН	'D?	ок	?	NOTES	REC	UIRE	D		
		Υ	N	Υ	N		DD	IP	PF	F	CR
	GENERAL SYSTEM WIDE FACILITIES										
1.	Location of Cameras						х	х	х	х	х
2.	Video to TCC Room Conduit							х	х	х	х
3.	Comments from Previous Submittal, Action Complete							х	х	x	х
4.	Mounting Details								x	х	x

SYSTEMS COMMUNICATION

TELEPHONE ITEMS

DESIGN CHECKLIST

Review	er: Organization:	Organization:			Discipline:	_ Discipline:			Sheet1 of					
Project:	SYSTEMS COMMUNICATION - TELEPHONE		Title:	e 11		*	Submittal:		_ Dat	е	1			
SYST			CH'D?		?	NOTES	,	REQUIRED						
		Υ	N	Υ	N			DD	IP	PF	F	CR		
	DRAWINGS - GENERAL ITEMS													
1.	Accuracy, Consistency, and Adequacy of Dimensions					e .		х	х	х	X.	х		
2.	Column, Reference Points and Match Lines Consistent							х	х	х	x	X		
3.	Compliance with Applicable Codes and Standards							х	х	х	х	Х		
4.	Consultant Identification							х	Х	х	х	Х		
5.	Contract Number							х	х	х	х	х		
6.	Correct Symbols from Legend							х	х	х	х	х		
7.	Cross Reference and Layout Index							х	х	х	х	х		
8.	Date							х	х	х	х	х		
9.	Drawing Numbers, Sheet Numbers, Revision Numbers - Shown in Order							х	х	x	х	x		
10.	Grammar							х	х	х	х	х		
11,	Index Sheets - Titles and Numbers							Х	Х	х	Х	X		
12.	Meets Design Criteria							х	х	х	х	X		
13.	Meets Drafting Criteria (Letter Sizes)							х	х	х	х	Х		
14.	North Arrow Direction							х	х	х	х	Х		

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TELEPHONE 1 of 3

DESIGN CHECKLIST

Review	er: Organiza	Organization:			Discipline:	Discipline:			Sheet <u>2</u> of:					
Project:	Contract No.:	Contract	Title:	S	12	s	ubmittal:		_ Dat	е	1	1		
SYST	TEMS COMMUNICATION - TELEPHONE	СН	'D?	ок	?	NOTES		REO	UIRE	D				
		Y	Z	Y	2			DD	IP	PF	F	CR		
15.	Proper Orientation of Plans, Sections, and Elevations							х	х	Х	х	Х		
16.	Room Numbers Consistent for Set							х	X	X	х	х		
17.	Scale and Graphics Scale							х	X	х	х	X		
18.	Spelling							х	X	X	х	X		
19.	Title Block Format							х	X	X	х	X		
20.	Coordination with Other Contracts								X	X	х	X		
21.	Criteria Conformance Checklist								X	Х	х	х		
22.	Interface with Other Disciplines								X	X	х	X		
23.	Match Line Location Coordinates							-	X	×	х	X		
24.	Standard Drawings Referenced								X	X	х	X		
25.	Discipline Drawings Referenced		- Ale							х	х	X		
26.	Freedom from Interferences									х	х	X		
27.	Third Party Requirements Included									х	х	X		
28.	Work Space and Access Space									х	х	X		
29.	Referencing Completed										х	X		
30.	Resolution of Design Review Comments					8	17				х	X		
31.	Signatures (Including P.E. Stamps)											Х		

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TELEPHONE 2 of 3

DESIGN CHECKLIST

Review	Reviewer: Organization: _			Discipline:				Sheet3			_ of	3_
Project	:: Contract No.: Cor	ntract	Title:			Su	ıbmittal:		_ Dat	te		
SYS	SYSTEMS COMMUNICATION - TELEPHONE			ок	(?	NOTES		REO	UIRE	<u></u>		
		Υ	N	Υ	N			DD	IP	PF	F	CR
	SYSTEMS COMMUNICATION - TELEPHONE											
1.	Location of Train Control and Communications Rooms							х	х	х	х	х
2.	Conduit Routing to Train Control Room								х	х	х	х
3.	Miscellaneous Details									х	х	х
4.	Location of Fire Telephone Jacks									х	х	х
5.	Location of Other Telephone Jacks									х	х	х
6.	ADA Requirements Reflected in Set									х	х	х
7.	All Problem Areas Resolved										x	х
8.	Comments from Previous Submittal, Action Complete											х

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TELEPHONE 3 of 3

SYSTEMS COMMUNICATION
RADIO ITEMS

DESIGN CHECKLIST

Reviewer: Organization:						Discipline:		s	_ Sheet _1_ of				
Project: Contract No.: Cont		tract	Title:				Submittal:		_ Dat	е	1	1	
SYST	TEMS COMMUNICATION - RADIO	СН	D?	ок	?	NOTES		REO					
		Υ	N	Y	N			DD	IP	PF	F	CR	
	DRAWINGS - GENERAL ITEMS												
1.	Accuracy, Consistency, and Adequacy of Dimensions							х	x	х	x	x	
2.	Column, Reference Points and Match Lines Consistent							x	X	X	x	x	
3.	Compliance with Applicable Codes and Standards							х	x	х	X	X	
4.	Consultant Identification							X	X	X	х	X	
5.	Contract Number							х	x	X	X	X	
6.	Correct Symbols from Legend						· · · · · · · · · · · · · · · · · · ·	х	x	х	X	х	
7.	Cross Reference and Layout Index							х	X	х	х	X	
8.	Date							х	X	х	х	X	
9.	Drawing Numbers, Sheet Numbers, Revision Numbers - Shown in Order							х	x	х	X	х	
10.	Grammar							х	X	х	х	х	
11.	Index Sheets - Titles and Numbers							х	X	х	х	х	
12.	Meets Design Criteria							X	x	х	х	х	
13.	Meets Drafting Criteria (Letter Sizes)							х	х	х	х	х	
14.	North Arrow Direction							х	X	х	х	х	

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DESIGN CHECKLIST

Reviewer:		ization: _					Discipline:		s	heet	2	of	_3_
Project:	Contract No.:	_ Contra	ct 1	Γitle:				Submittal:		_ Dat	te	1	1
SYST	EMS COMMUNICATION - RADIO		CH'	D?	ок	?	NOTES		REC	UIRE	D		
			Y	N	Υ	N			DD	IP	PF	F	CR
15.	Proper Orientation of Plans, Sections, and Elevations								х	х	х	х	X
16.	Room Numbers Consistent for Set								х	х	х	х	x
17.	Scale and Graphics Scale								Х	х	х	х	X
18.	Spelling								х	х	х	х	х
19.	Title Block Format								х	х	х	х	Х
20.	Coordination with Other Contracts									х	х	х	X
21.	Criteria Conformance Checklist									х	х	х	Х
22.	Interface with Other Disciplines									х	х	х	х
23.	Match Line Location Coordinates						8	×		х	х	х	X
24.	Standard Drawings Referenced									х	х	X	X
25.	Discipline Drawings Referenced										х	х	Х
26.	Freedom from Interferences										х	х	Х
27.	Third Party Requirements Included										х	х	х
28.	Work Space and Access Space									0 101	х	х	х
29.	Referencing Completed											х	х
30.	Resolution of Design Review Comments											х	х
31.	Signatures (Including P.E. Stamps)												х

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DESIGN CHECKLIST

Deview	er: Organization		-		Discipline:	ა	neet .	_3_	_ от	3	
Project:	Project: Contract No.: Cont					Submittal:		_ Dat	te		
SYST	TEMS COMMUNICATION - RADIO	СН	D?	ок	7	NOTES	REC	REQUIRED			
		Υ	N	Υ	N		DD	IP	PF	F	CR
	SYSTEMS COMMUNICATIONS - RADIO										
1.	Comments from Previous Submittal, Action Complete							x	х	x	х
2.	Provisions for Routing							х	х	х	x
3.	General Provisions								х	X	х
4.	Arrangement and Insert Wall Sleeve Locations								х	х	x
5.	Radio Interference with Lighting, Solid State Trip Breakers								х	x	x
6.	Cable Runs Shown								х	х	х
7.	Toner Plan, Details								х	x	x
8.	Channel Frequencies Designated								х	х	х
9.	All Problem Areas Resolved									х	х

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SYSTEMS COMMUNICATION

PUBLIC ADDRESS ITEMS

DESIGN CHECKLIST

Review	er: Organization:					Discipline:		s	heet .	1_	of	_3
Project:	Contract No.: Contract No.:	tract	Title:				Submittal:		_ Dat	te	1	1
SYST	TEMS COMMUNICATION - PUBLIC ADDRESS	СН	'D?	ок	?	NOTES		REC	UIRE	D		
		Υ	N	Υ	N			DD	IP	PF	F	CR
	DRAWINGS - GENERAL ITEMS											
1.	Accuracy, Consistency, and Adequacy of Dimensions							x	х	х	х	х
2.	Column, Reference Points and Match Lines Consistent							х	х	х	x	х
3.	Compliance with Applicable Codes and Standards							х	х	х	х	х
4.	Consultant Identification							х	х	х	х	х
5.	Contract Number							х	Х	х	х	Х
6.	Correct Symbols from Legend							х	х	х	X	х
7.	Cross Reference and Layout Index							х	х	х	х	х
8.	Date							х	х	х	х	х
9.	Drawing Numbers, Sheet Numbers, Revision Numbers - Shown in Order		٠					х	х	х	х	х
10.	Grammar							х	X	х	х	х
11.	Index Sheets - Titles and Numbers							Х	X	Х	X	Х
12.	Meets Design Criteria							х	х	х	х	х
13.	Meets Drafting Criteria (Letter Sizes)							х	х	х	х	х
14								v	v	v	Y	¥

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PUBLIC ADDRESS 1 of 3

DESIGN CHECKLIST

Reviewe	er: Organiz	ation:				Discipline:		Sheet2_			_3_
Project:	Contract No.:	Contract	Title:			Submitt	tal:	_ Da	te	1	1
SYST	EMS COMMUNICATION - PUBLIC ADDRESS	СН	′D?	ок	?	NOTES	RE	QUIR	ED		
		Y	N	Υ	N		DD	IP	PF	F	CR
15.	Proper Orientation of Plans, Sections, and Elevations					н	х	х	х	х	х
16.	Room Numbers Consistent for Set						. X	х	х	х	х
17.	Scale and Graphics Scale						х	х	х	х	х
18.	Spelling						х	х	х	х	х
19.	Title Block Format						х	х	х	х	х
20.	Coordination with Other Contracts							х	х	х	х
21.	Criteria Conformance Checklist					Section 200		х	х	х	х
22.	Interface with Other Disciplines							х	х	х	х
23.	Match Line Location Coordinates							х	х	х	х
24.	Standard Drawings Referenced							х	х	х	х
25.	Discipline Drawings Referenced								х	х	х
26.	Freedom from Interferences								х	х	х
27.	Resolution of Design Review Comments								х	х	х
28.	Third Party Requirements Included								х	х	х
29.	Work Space and Access Space								х	х	х
30.	Referencing Completed									х	х
31.	Signatures (Including P.E. Stamps)										х

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PUBLIC ADDRESS 2 of 3

DESIGN CHECKLIST

Review	ver: Organization	:	Discipline:				8	Sheet <u>3</u> _			_3_
Project	: Contract No.: Co	ntract	Title:	-		Submittal:		_ Da	te		1
SYS	TEMS COMMUNICATION - PUBLIC ADDRESS	СН	D?	ок	?	NOTES	REC	UIR	ED		
		Υ	N	Υ	N		DD	IP	PF	F	CR
S	YSTEMS COMMUNICATIONS - PUBLIC ADDRESS										
1.	Speaker Conduit and Loop							х	х	х	х
2.	Comments from Previous Submittal, Action Complete							х	х	х	x
3.	All Problem Areas Resolved								х	х	х
4.	Installation Details								х	х	х
5.	Location of Speaker Boxes								х	х	х
6.	Tests for Acoustics Specified								х	х	х
7.	Amplifier Locations Shown								х	х	х
8.	Coordination with Elevator								х	х	х
9.	Central Control Panel Locations								х	х	х
10.	Plans and Details of Equipment								х	х	х

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PUBLIC ADDRESS 3 of 3

DESIGN CHECKLIST

SYSTEMS COMMUNICATION
FIBER OPTIC ITEMS

DESIGN CHECKLIST

Reviewe	or: Organization:					Discipline:	s	heet _	1	of	_4_
Project:	Contract No.: Con-	tract '	Title:			Submittal:		_ Dat	ө	1	1
FIBER	OPTIC AND CABLE TRANSMISSION SYSTEM	СН	'D?	ок	?	NOTES	REO	UIRE	D		
	~	Υ	N	Υ	N		DD	IP	PF	F	CR
	DRAWINGS - GENERAL ITEMS										
1.	Accuracy, Consistency, and Adequacy of Dimensions						х	X	X	х	X
2.	Column, Reference Points and Match Lines Consistent						X	X	X	х	x
3.	. Compliance with Applicable Codes and Standards						х	X	X	х	X
4.	Consultant Identification						х	х	х	х	X
5.	Contract Number						х	х	х	х	х
6.	Correct Symbols from Legend						х	х	х	х	X
7.	Cross Reference and Layout Index						х	х	х	х	х
8.	Date						х	х	х	х	х
9.	Drawing Numbers, Sheet Numbers, Revision Numbers - Shown in Order						х	х	х	x	x
10.	Grammar						х	х	х	х	X
11.	Index Sheets - Titles and Numbers						х	х	х	Х	Х
12.	Meets Design Criteria						х	х	х	х	х
13.	Meets Drafting Criteria (Letter Sizes)						х	х	х	х	х
14.	North Arrow Direction						х	х	х	х	х

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FIBER OPTIC 1 of 4

DESIGN CHECKLIST

Reviewe	er: Organiza	tion:				Discipline:	s	heet	2	_ of	_4
Project:	Contract No.:	Contract	Title:	<u> </u>		Submittal:				1	1
FIBER	R OPTIC AND CABLE TRANSMISSION SYSTEM	СН	D?	ок	?	NOTES	REC	UIRE	D		
		Y	N	Υ	N		DD	IP	PF	F	CR
15.	Proper Orientation of Plans, Sections, and Elevations						х	х	х	х	х
16.	Room Numbers Consistent for Set						х	х	х	х	х
17.	Scale and Graphics Scale						х	х	х	х	х
18.	Spelling						х	х	х	х	х
19.	Title Block Format						х	х	х	х	х
20.	Coordination with Other Contracts							х	х	х	х
21.	Criteria Conformance Checklist							х	х	х	х
22.	Interface with Other Disciplines							х	х	х	х
23.	Match Line Location Coordinates							х	х	х	х
24.	Standard Drawings Referenced							х	х	х	х
25.	Discipline Drawings Referenced								х	х	х
26.	Freedom from Interferences								х	х	х
27.	Third Party Requirements Included								х	х	х
28.	Work Space and Access Space								х	х	х
29.	Referencing Completed								х	х	х
30.	Resolution of Design Review Comments									х	х
31.	Signatures (Including P.E. Stamps)										х

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DESIGN CHECKLIST

Review	er: Organizati	ion:				Discipline:	Discipline: Sheet <u>3</u> of					_4_
Project	: Contract No.:	Contract	Title:				Submittal:		_ Dat	te	1	
FIBE	R OPTIC AND CABLE TRANSMISSION SYSTEM	СН	′D?	ок	?	NOTES		REC	UIRE	D		
		Y	N	Υ	N			DD	IP	PF	F	CR
FIB	BER OPTIC AND CABLE TRANSMISSION SYSTEM											
1.	System Block Diagram -CT							х	х	х	х	х
2.	Rack Elevations/Cabinets for CCF								х	х	х	х
3.	Power Requirements Remote Sites								х	х	х	х
4.	Rack Elevations/Cabinets for Sites								х	х	х	х
5.	System Block Diagram - Telephone								х	х	х	х
6.	Channel Assignments - DS-2									х	х	х
7.	Channel Assignments - DS-1						·			х	х	х
8.	Channel Assignments - DS-0	345								х	х	х
9.	Power Requirements CCF									х	х	х
10.	Channel Assignments - DS-3									х	х	х
11.	Main Distribution Frame Assignments									х	х	х
12.	Channel Assignments - M560									х	х	х
13.	Equipment Cabling - Remote Sites									х	х	х
14.	Equipment Cabling - CCF					*				х	х	х
15.	Fiber Optic Panel Stenciling									х	х	X
16.	Main Distribution Frame Block Stenciling				C. (D. () ()					х	X	X
17.	Fiber Optic Panel Assignments									X	X	×
										7.		· · ·

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DESIGN CHECKLIST

Reviewer: Organization		zation:				Discipline:	:	Sheet	_4_	_ of	_4
Project:	Contract No.:	_ Contract	Title:			Submittal:		_ Da	te		1
FIBER OPTIC AND CABLE TRANSMISSION SYSTEM		и сн	'D?	ОК	(?	NOTES	REC	QUIRI	ED		
		Y	N	Υ	N		DD	IP	PF	F	CR
18. System Interface	Ĺ								Х	х	Х

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DESIGN CHECKLIST

SYSTEMS COMMUNICATION

CABLE TRANSMISSIONS SYSTEMS

DESIGN CHECKLIST

Review	er: Organization:	Organization:			Discipline:	Discipline:			Sheet1 of _					
Project:	Contract No.: Con	tract	Title:			Submi	ttal:		_ Dat	te	1	_/		
CABL	E TRANSMISSION SYSTEMS	СН	D?	ок	?	NOTES		REO	UIRE	D				
		Υ	N	Υ	N			DD	IP	PF	F	CR		
	DRAWINGS - GENERAL ITEMS													
1.	Accuracy, Consistency, and Adequacy of Dimensions				i.			х	x	х	X	х		
2.	Column, Reference Points and Match Lines Consistent							х	х	х	х	х		
3.	Compliance with Applicable Codes and Standards							х	х	х	х	х		
4.	Consultant Identification							х	х	х	х	х		
5.	Contract Number							х	х	х	х	х		
6.	Correct Symbols from Legend							х	х	х	х	х		
7.	Cross Reference and Layout Index							х	х	х	х	х		
8.	Date							х	х	х	х	х		
9.	Drawing Numbers, Sheet Numbers, Revision Numbers - Shown in Order							х	х	х	х	х		
10.	Grammar							х	х	х	х	Х		
11.	Index Sheets - Titles and Numbers							х	х	х	х	Х		
12.	Meets Design Criteria					6		х	х	х	х	Х		
13.	Meets Drafting Criteria (Letter Sizes)							х	х	х	х	х		
14.	North Arrow Direction							х	х	х	х	х		

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CABLE TRANSMISSION SYSTEM 1 of 4

DESIGN CHECKLIST

Reviewe	or: Org	Organization:				Discipline:			heet _	2	of	_4	
Project:	Contract No.:	Contract Title:					Submittal: Date/			1	1		
CABL	E TRANSMISSION SYSTEMS		СН	'n?	ОК	.7	NOTES		REC	UIRE	D		
			Υ	N	Υ	N			DD	IP	PF	F	CR
15.	Proper Orientation of Plans, Sections, and Elevations								х	Х	х	х	X
16.	Room Numbers Consistent for Set								х	X	x	X	X
17.	Scale and Graphics Scale								Х	X	X	х	X
18.	Spelling								Х	X	X	х	X
19.	Title Block Format								Х	х	Х	х	х
20.	Coordination with Other Contracts									X	x	x	х
21.	Criteria Conformance Checklist									х	X	x	х
22.	Interface with Other Disciplines									х	Х	х	х
23.	Match Line Location Coordinates									х	х	х	х
24.	Standard Drawings Referenced									X	х	х	х
25.	Discipline Drawings Referenced										х	х	х
26.	Freedom from Interferences										х	х	х
27.	Third Party Requirements Included										Х	Х	х
28.	Work Space and Access Space	•									х	х	х
29.	Referencing Completed											х	х
30.	Resolution of Design Review Comments							:				х	х
31.	Signatures (Including P.E. Stamps)												х

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CABLE TRANSMISSION SYSTEM 2 of 4

DESIGN CHECKLIST

Review	leviewer:		Organization:				Discipline:	Discipline: Shee				4
Project:	Contract No.:	Cont	ract '	Title:			Submittal:		_ Dat	e	I	1
CABL	E TRANSMISSION SYSTEMS		СН	'D?	ок	?	NOTES	REC	UIRE	D		
			Υ	N	Υ	N		DD	IP	PF	F	CR
	CABLE TRANSMISSION SYSTEMS											
1.	System Block Diagram -CT							х	х	х	х	х
2.	Power Requirements Remote Sites								х	х	х	х
3.	Rack Elevations/Cabinets for Sites								х	х	х	х
4.	Rack Elevations/Cabinets for CCF								х	х	х	х
5.	System Block Diagram - Telephone									х	х	х
6.	Power Requirements CCF									х	х	х
7.	System Ductbank Layout									х	х	х
8.	Emergency Trip Switch Zones									х	х	х
9.	Fiber Cable Distribution									х	х	Х
10.	Copper Cable Distribution									х	х	х
11.	Riser Diagrams									х	х	х
12.	Fiber Optic Panel Assignments									х	х	х
13.	Channel Assignments - DS-0									Х	х	Х
14.	Channel Assignments - DS-1									х	х	х
15.	Channel Assignments - DS-2									х	х	х
16.	Channel Assignments - DS-3									х	х	х
17.	Fiber Optic Panel Stenciling						Č			х	х	х
						_						

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CABLE TRANSMISSION SYSTEM 3 of 4

DESIGN CHECKLIST

Reviewe	er: Organiz	zation:				Discipline:	s	heet	4	_ of	_4_
Project:	Contract No.:	_ Contract	Title:			Submittal:		_ Da	te	1	1
CABL	E TRANSMISSION SYSTEMS	СН	D?	ок	?	NOTES	REC	QUIRE	D		
		Υ	N	Υ	N		DD	IP	PF	F	CR
18.	Channel Assignments - M560								Х	х	Х
19.	Equipment Cabling - Remote Sites									X.	х
20.	Main Distribution Frame Assignments					*				х	x
21.	Equipment Cabling - CCF									х	Х
22.	Main Distribution Frame Block Stenciling									х	х

CABLE TRANSMISSION SYSTEM 4 of 4

DESIGN CHECKLIST

TRAIN CONTROL SYSTEM ITEMS

DESIGN CHECKLIST

Review	er: Organization:	Organization:			Discipline:	s	_4_				
Project:	Contract No.: Con	tract	Title:			Submittal:		_ Da	te	1	1
TRAI	N CONTROL SYSTEM	СН	D?	ок	?	NOTES	REC	UIRE	D		
	*	Υ	N	Υ	N		DD	IP	PF	F	CR
	DRAWINGS - GENERAL ITEMS										
1.	Accuracy, Consistency, and Adequacy of Dimensions						х	х	х	х	x
2.	Column, Reference Points and Match Lines Consistent						х	х	х	х	x
3.	Compliance with Applicable Codes and Standards						х	х	х	х	х
4.	Consultant Identification						х	х	х	х	х
5.	Contract Number						х	х	х	х	х
6.	Correct Symbols from Legend						х	х	х	х	х
7.	Cross Reference and Layout Index					8	х	х	х	х	х
8.	Date						х	х	х	х	х
9.	Drawing Numbers, Sheet Numbers, Revision Numbers - Shown in Order						х	x	х	х	х
10.	Grammar						х	х	х	х	х
11.	Index Sheets - Titles and Numbers						х	Х	Х	х	Х
12.	Meets Design Criteria						х	х	х	х	х
13.	Meets Drafting Criteria (Letter Sizes)						х	х	х	х	х
14.	North Arrow Direction						х	X	х	х	х

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TRAIN CONTROL 1 of 4

DESIGN CHECKLIST

Reviewer:		Organization:				Discipline:			heet .	_ of	_4_	
Project:	Contract No.:	_ Contr	act T	Title:			Submittal:		_ Dat	te	1	1
TRAII	N CONTROL SYSTEM		CH'	D?	ок	?	NOTES	REC	UIRE	D		
			Υ	N	Υ	N		DD	IP	PF	F	CR
15.	Proper Orientation of Plans, Sections, and Elevations							х	х	х	х	х
16.	Room Numbers Consistent for Set							х	х	х	х	х
17.	Scale and Graphics Scale							х	х	х	x	х
18.	Spelling							х	х	х	х	х
19.	Title Block Format							х	х	х	х	х
20.	Coordination with Other Contracts								х	х	х	х
21.	Criteria Conformance Checklist								х	х	x	х
22.	Interface with Other Disciplines								х	х	х	х
23.	Match Line Location Coordinates								х	х	х	х
24.	Standard Drawings Referenced								х	х	x	x
25.	Discipline Drawings Referenced									х	x	х
26.	Freedom from Interferences									х	x	х
27.	Third Party Requirements Included									х	х	х
28.	Work Space and Access Space									х	х	х
29.	Referencing Completed						8				х	х
30.	Resolution of Design Review Comments										х	х
31.	Signatures (Including P.E. Stamps)											х

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TRAIN CONTROL 2 of 4

DESIGN CHECKLIST

Review	er: Organization:					Discipline:	Discipline: Shee				_4_
Project: Contract No.: Co		Contract Title:				Submittal:	Submittal: Date				1
TRAIN CONTROL SYSTEM		СН	D?	ок	?	NOTES	REC	REQUIRED			
		Υ	N	Υ	N		DD	IP	PF	F	CR
	TRAIN CONTROL SYSTEM										
1.	Size and Location of Train Control Room						х	X	х	х	х
2.	Battery Room Conduit Routing							X	X	х	X
3.	Comments from Previous Submittal, Action Complete							X	X	х	х
4.	Battery Locations Identified							X	х	x	х
5.	Conduit Routing and Disconnect Location to Train Control Room							X	х	X	х
6.	Systemwide Pull Boxes Identified & Located							х	х	X	x
7.	Layout of Train Control Room							X	х	х	х
8.	Systemwide Duct Banks Labeled							X	х	х	х
9.	Conduit and/or Pull Boxes for Switch Machine Installations								x	x	x
10.	Conduit or Duct Routing Within Train Control Room								х	х	х
11.	All Problem Areas Resolved					3				х	х
12.	Access Openings Identified										
	a. Pull Boxes Located							х	х	х	х
	b. Interlocking Indication Signals								х	х	X

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DESIGN CHECKLIST

Reviewer:		Organization:				Discipline:		s	heet	4_	_ of	_4_
Project:	Contract No.:	Contract Ti	itle:				Submittal:		_ Da	te	1	1
TRAIN CONTROL SYSTEM		CH'E	D?	ок	?	NOTES		REC	UIRE	D		
	a.	Y	N	Υ	N			DD	IP	PF	F	CR
c. Ways	ide Pushbuttons									х	х	Х
13. Testing I	Requirements Specified									x	х	X

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DESIGN CHECKLIST

SYSTEMS COMMUNICATION
SCADA/TRACS ITEMS

DESIGN CHECKLIST

Reviewer: Organization			Discipline:						Sheet1			4
Project: Contract No.: Con							Submittal:			Date/		
TRANSIT AUTOMATIC CONTROL AND SCADA (TRACS)		СН	D?	ок	?	NOTES		REC	UIRE	D		
		Υ	N	Υ	N			DD	IP	PF	F	CR
	DRAWINGS - GENERAL ITEMS											
1.	Accuracy, Consistency, and Adequacy of Dimensions							х	x	х	х	х
2.	Column, Reference Points and Match Lines Consistent							х	x	x	х	х
3.	Compliance with Applicable Codes and Standards							х	х	х	х	х
4.	Consultant Identification							х	х	х	х	х
5.	Contract Number							х	х	х	х	х
6.	Correct Symbols from Legend							х	х	х	х	х
7.	Cross Reference and Layout Index							х	х	х	х	х
8.	Date							х	х	х	х	х
9.	Drawing Numbers, Sheet Numbers, Revision Numbers - Shown in Order							х	х	х	х	x
10.	Grammar							х	х	х	х	х
11.	Index Sheets - Titles and Numbers							х	х	х	х	х
12.	Meets Design Criteria							х	х		х	х
13.	Meets Drafting Criteria (Letter Sizes)							х	х	х	х	х
14.	North Arrow Direction		177					х	х	х	х	х

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DESIGN CHECKLIST

Reviewer:		Organization:				Discipline:	s	heet	_2	_ of	_4_	
Project:	Contract No.:	_ Contract	Title:			Submittal:		_ Da	te	1		
	NSIT AUTOMATIC CONTROL AND SCADA	ADA CH'D?		ОК	?	NOTES	REC	REQUIRED				
(TRA	CS)	Y	N	Υ	N		DD	IP	PF	F	CR	
15.	Proper Orientation of Plans, Sections, and Elevations						х	х	х	х	Х	
16.	Room Numbers Consistent for Set						х	х	х	х	х	
17.	Scale and Graphics Scale						х	х	х	х	х	
18.	Spelling						х	х	х	х	х	
19.	Title Block Format						х	Х	х	х	х	
20.	Coordination with Other Contracts							х	х	х	х	
21.	Criteria Conformance Checklist							Х	х	х	х	
22.	Interface with Other Disciplines							х	х	х	х	
23.	Match Line Location Coordinates							х	х	х	х	
24.	Standard Drawings Referenced							х	х	х	х	
25.	Discipline Drawings Referenced								х	х	х	
26.	Freedom from Interferences								х	х	х	
27.	Third Party Requirements Included								х	х	х	
28.	Work Space and Access Space					-			х	х	х	
29.	Referencing Completed									х	х	
30.	Resolution of Design Review Comments									х	х	
31.	Signatures (Including P.E. Stamps)										х	

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DESIGN CHECKLIST

Review	er: Organiza	ation:				Discipline:	Discipline: Sheet 3					
Project	Contract No.:	Contract	Title:			Submittal:		_ Dat	te	1	1	
TRAI (TRA	NSIT AUTOMATIC CONTROL AND SCADA	СН	'n?	ок	.7	NOTES	REQUIRED					
		Y	N	Υ	N		DD	IP	PF	F	CR	
	TRACS ITEMS											
1.	TRACS Applications Functions						x	х	х	X	х	
2.	User Interface Functions						х	х	х	х	Х	
3.	Alarm Processing Requirements						х	х	х	х	х	
4.	CCF Hardware Characteristics Requirements						х	Х	х	х	Х	
5.	RTU Characteristics						x	х	х	х	х	
6.	Software Requirements						х	х	х	х	х	
7.	TRACS System Block Diagram						х	х	х	х	х	
8.	TRACS System Database Requirements							х	х	х	х	
9.	TRACS System Shipment and Installation							Х	х	х	Х	
10.	TRACS Test Program							х	х	х	х	
11.	Station Interfaces and Points Count								х	х	х	
12.	Inter-Computer Systems Interfaces								х	х	х	
13.	CRT Displays Requirements	07							х	х	Х	
14.	General Color Conventions								х	х	х	
15.	Report Requirements								х	х	х	
16.	System Availability								х	х	х	
17.	System Performance								х	х	х	

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Project: Contract No.: Cont		tract	Title:			Submittal:	-	_ Dat	te		1
TRANSIT AUTOMATIC CONTROL AND SCADA (TRACS)		CH'D?		ок	?	NOTES	REC	UIRE	D		
		Υ	N	Υ	N		DD	IP	PF	F	CR
18.	Segment 1 - Segment 2 Phaseover Considerations								х	Х	Х
19.	TRACS System Maintenance								х	x	х
20.	Documentation Requirements and CDRL List								х	x	X
21.	TRACS Interfaces Diagram								х	х	х

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DESIGN CHECKLIST

SYSTEMS COMMUNICATION
TRACTION POWER ITEMS

DESIGN CHECKLIST

Reviewer: Organization:						Discipline:	s	heet _	1	of	_4_
Project:	Contract No.: Con	tract	Title:			Submittal:		_ Dat	е	1	1
SYST	EMS COMMUNICATION - TRACTION POWER	СН	'n?	ок	?	NOTES	REO	UIRE	D		
		Υ	N	Y	N		DD	IP	PF	F	CR
	DRAWINGS - GENERAL ITEMS										
1.	Accuracy, Consistency, and Adequacy of Dimensions						х	х	X	х	X
2.	Column, Reference Points and Match Lines Consistent						х	х	х	х	X
3.	Compliance with Applicable Codes and Standards						х	х	х	х	Х
4.	Consultant Identification						х	х	х	х	Х
5.	Contract Number						х	х	х	х	Х
6.	Correct Symbols from Legend						х	х	х	х	х
7.	Cross Reference and Layout Index						х	х	х	х	Х
8.	Date						х	х	х	х	X
9.	Drawing Numbers, Sheet Numbers, Revision Numbers - Shown in Order						х	х	X	х	x
10.	Grammar						х	х	х	х	х
11.	Index Sheets - Titles and Numbers						х	х	x	х	Х
12.	Meets Design Criteria						х	х	x	х	х
13.	Meets Drafting Criteria (Letter Sizes)						х	х	х	х	х
14.	North Arrow Direction						х	х	х	х	х

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DESIGN CHECKLIST

Review	er: Organi	Organization:					s	Sheet _2_ of _4					
Project:	Contract No.:	_ Contract	Title:			Submittal:	<u></u>	_ Da	te	1			
SYST	TEMS COMMUNICATION - TRACTION POWER	СН	D?	ок	?	NOTES	REC	UIRE	Đ				
		Y	N	Υ	N		DD	IP	PF	F	CR		
15.	Proper Orientation of Plans, Sections, and Elevations						х	х	х	х	х		
16.	Room Numbers Consistent for Set						х	х	х	х	х		
17.	Scale and Graphics Scale						х	х	х	х	х		
18.	Spelling						x	х	х	х	х		
19.	Title Block Format						x	х	х	х	х		
20.	Coordination with Other Contracts							х	х	х	х		
21.	Criteria Conformance Checklist							х	х	х	х		
22.	Interface with Other Disciplines							х	х	х	х		
23.	Match Line Location Coordinates							х	х	х	х		
24.	Standard Drawings Referenced							х	х	х	х		
25.	Discipline Drawings Referenced								х	х	х		
26.	Freedom from Interferences								х	х	х		
27.	Third Party Requirements Included								х	х	х		
28.	Work Space and Access Space								х	х	х		
29.	Referencing Completed									х	х		
30.	Resolution of Design Review Comments									х	х		
31.	Signatures (Including P.E. Stamps)										х		
				-							The same		

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DESIGN CHECKLIST

Review	er: Organization:	Organization:					s	_ of	of <u>4</u>		
Project: Contract No.: Contract		ontract Title: Submittal:					Date/				
SYST	EMS COMMUNICATION - TRACTION POWER	СН	D?	ок	?	NOTES	REC	UIRE	D		
		Υ	N	Y	Z		DD	IP	PF	F	CR
SYSTEMS COMMUNICATION TRACTION POWER ITEMS											
1.	Substation Location						х	х	х	х	х
2.	Location of Maintenance Walkway						х	х	х	х	х
3.	General Location and Arrangement of Contact Rail						х	х	х	х	х
4.	Buried and Embedded Conduit Identified							х	х	х	х
5.	Comments from Previous Submittal, Action Complete							x	х	х	х
6.	OCS Pole Locations, Clearance							х	х	х	х
7.	Contact Wire Elevation, Size, Tension							х	х	х	х
8.	Gap Breaker Building Locations							х	х	х	х
9.	Manholes/Pullboxes, Locations							х	х	х	х
10.	Contact Rail Jumper Cable Conduits							х	х	х	х
11.	Cross Bonding Provisions							х	х	х	Х
12.	Grounding Mat							х	х	х	х
13.	Substation Building Details					9			х	х	Х
14.	Emergency Trip Station Conduit Sub-Ups								х	х	Х
15.	Gap Breaker Station Details								х	х	х
16.	Substation to Track or Gap Breaker Station to Track Details								х	х	х

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DESIGN CHECKLIST

Reviewer: Organization: _				Discipline:			s	heet	4	of	_4_
Project	: Contract No.: Con	tract	Title:			Submittal:		_ Dat	te	1	
SYS	TEMS COMMUNICATION - TRACTION POWER	СН	'n?	ОК	?	NOTES	REC	UIRE	D		
		Υ	N	Υ	N		DD	IP	PF	F	CR
17.	Sleeves, Chases, Blockouts in Structures Where Needed								х	X	х
18.	Transformer Testing and Maintenance Requirements								х	X	х
19.	All Problem Areas Resolved									х	х

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