# BUILDING MAINTENANCE INSPECTION AND QUALITY MEASUREMENT

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## 1. GENERAL

- 1.01 This section replaces AT&T Section
  770-200-100. It is issued to set
  forth the building maintenance inspection
  guidelines for Southwestern Bell. Building
  maintenance may be defined as those efforts
  exerted on an ongoing basis in preserving
  the life and appearance of those portions
  of the building which comprise the enclosure
  for the contents, its appurtenances, and
  the grounds but excluding its mechanical
  and electrical systems.
- 1.03 This section outlines a procedure for inspecting and evaluating the

quality of building maintenance in Telephone Company buildings as well as the thoroughness in which it is accomplished. It is intended to serve as an aid to those supervisory personnel responsible for the administration of this function on an inhouse basis as well as those responsible for the administration of contracts with building maintenance contractors. It further serves as a guide for maintaining a sound and safe environment in and around Telephone Company buildings.

- 1.04 It is intended that inspections will be made by personnel qualified to recognize and evaluate the physical condition of the building to:
  - (1) Determine the quality of the building maintenance functions as a whole and whether its various phases are in good balance.
  - (2) Determine that contractors are performing the building maintenance function in strict accordance with the executed contract.
  - (3) Determine that the work is being performed in accordance with approved practices.
  - (4) Recommend corrective measures if the quality of the work, methods employed, or work frequencies require them.

The plan for inspection outlined herein does not supersede day-to-day supervisory observation and correction of defective building maintenance items but should supplement them.

- 1.05 All references made herein were current at the time of this issue. Subsequent changes in reference material should be researched by the user.
- 1.06 Frequency of Inspections -- Building maintenance inspections are scheduled at such intervals as local conditions may require. It is recommended, however, that this inspection format be used as part of an operational review and by local management to complete a building inspection at least annually at each location.

## 2. INSPECTION FORM AND CHECKLIST

- 2.01 For the purpose of inspection, building maintenance is divided into eight classifications as follows:
  - (1) Structural
  - (2) Roof
  - (3) Landscaping and Grounds
  - (4) Walls, Partitions, Doors, Ceilings
  - (5) Floor Covering
  - (6) Appurtenances
  - (7) Sidewalks, Drives, Paving
  - (8) Windows, Frames, Window Treatments.
- 2.02 An inspection report, Form SW-6482 (Exhibit 1), shall be used for guidance in making a building maintenance inspection.
- 2.03 Form SW-6482 is available through hard copy requisition procedures.

  The minimum order through these procedures is 500 copies of the form.
- 2.04 A copy of this form completed for a typical inspection, along with example checklists, is shown in Exhibit 1. The form provides a list of the classifications as well as space for general information regarding the building under review.

Part two of the form contains a checklist and space for notes. Typical conditions to be observed are contained in paragraphs 5.01 through 12.03 of this section and in the checklist.

- 2.05 The form also includes a table for evaluating building maintenance results. Numerical values of 0 through 10 are established for each of the eight classifications and each will be multiplied by the assigned weighting factor. The inspection plan thus indicates whether a balanced job is being done and, if not, where attention is necessary to bring all classifications to the desired level. This may be accomplished by additional or redirected effort, more supervisory attention, better administration of service contracts, or other action.
- 2.06 The conditions observed under each classification are initially considered in terms of Higher than Objective (10.0-8.6), within the Objective Band (8.5-8.0), Lower than Objective (7.9-6.0), and Unsatisfactory (5.9-0) with the appropriate quality rating number assigned. For example, a roof that appears in good condition without any defects (such as bare spots, blisters, ruptures, splits, punctures, etc) is rated in the Objective Band. Further definition of the Bands is as follows:
- (H) Higher than Objective Band-more than service demands and possibly not cost effective.
- (0) Objective Band--within service demands and cost effective.

- Lower than Objective Band--(L) less than satisfactory service level, needs improvement.
- (U) Unsatisfactory Band--unsatisfactory service level, immediate attention required.
- 2.07 Care should be exercised in assigning quality ratings to the various classifications. They should be assigned on an impartial basis and should be based on conditions that exist at the time of the inspection, although consideration should be given to the elapsed time since the last scheduled operation. For instance, a painted wall could not be expected to be entirely free of blemishes if repainting was scheduled in the near future.
- 2.08 Appearance is a factor that tends to affect the assignment of quality ratings. Generally, a good building maintenance job and good appearance go hand in hand, but occasionally building items may look poorly because of advanced age or cleanliness which is the responsibility of others. In determining quality ratings, care should be exercised not to penalize an otherwise good maintenance job because of poor appearance attributed to normal functional obsolescence of the building or poor housekeeping on the part of others.
- 2.09 A factor that will influence the total quality value is the absence of one or more classifications in a particular building. For example, if an equipment building does not have landscaping and grounds, enter the letters N/A (not applicable) around and through the building from roof in the column adjacent to this classification. The absence of a rating in the missing classification would reflect a total quality

value lower than if it was included. This is compensated for by dividing the Total Quality Value by the Total Weighting Factor.

2.10 A single form may be used for one building. In the case of a large multistory building, several floors may be selected as representative of the entire building. On subsequent inspections, other floors should be considered for inspection. The selected floors should be noted on the form. A quality result for the entire building is determined from the conditions observed on the selected floors. If a more detailed report is desired or the size of the building warrants, each floor may be entered on separate forms. These can be averaged and consolidated on a single form to establish an overall quality index for the building.

## 3. PRELIMINARY PROCEDURE

3.01 Before starting the actual inspection, fill in the data on the inspection form (i.e., the date, building name, address, city and state, geographic location code, sector/zone, building square feet, building group, and the building maintenance information -- if inhouse, the estimated work hours per month or if contract, the estimated contract cost per month).

## INSPECTION -- GENERAL

4.01 Inspection is performed by observation of all items shown in the checklist and of any others observed while walking to basement.

- 4.02 The items listed in subsequent paragraphs under headings corresponding to the subdivisions on the inspection form are those points that should be considered in rating the quality of the building maintenance job being performed. Items found that are not the responsibility of the building maintenance force should be noted for future reference to the appropriate party. These items should not influence the quality rating assigned to the particular classification.
- 4.03 It should be noted that the following list is by no means complete, but will serve as a base for evaluating the building maintenance job being performed.
- 4.04 The checklist contains a column adjacent to the principal conditions to be observed (STATUS). This column is for indicating the condition and should be noted [ / (deviation), OK, N/A (not applicable)]. The remaining column is for notes made on items requiring attention and may be used for reference in preparing annual budgets for building repair work.

## STRUCTURAL--CLASSIFICATION 1

- 5.01 Masonry:
  - .No open joints in the exterior masonry.
  - .No structural cracks in the exterior walls.
  - .No structural cracks in the stonework, terra cotta, or other types of masonry.
  - .No structural cracks in uncovered floor slabs.

- ..Brick walls free of spalling.
- .No loose masonry.
- .No efflorescence as a result of moisture penetration.
- 5.02 Steel Work:
  - .Rust free.
  - .Corrosion free.
  - .No damaged members.
  - .Adequate protection when exposed.
- 5.03 Foundation Walls:
  - .No water, moisture penetration.
  - .Free of spalling, cracks, shifting.
  - .No evidence of poor foundation drainage.
- 5.04 Towers:
  - .Rust, corrosion free.
  - .No loose nuts and bolts.
- 6. ROOF--CLASSIFICATION 2
- 6.01 Membrane:
  - .No bare spots (gravel not completely covering membrane).
  - .No fish mouths.
  - .No blisters.
  - .No alligatoring.

- .No ruptures (caused by dropped objects, backed-out anchors, perforated blisters, etc).
- .No splits (caused by contraction and/or other building stresses).
- 6.02 Flashing, Gravel Stops, Pitch Pockets. etc:
  - .No horizontal stretch of flashing (caused by deck or structural shifting).
  - .Composition base flashing not punctured.
  - .Felt stripping on metal flanges not deteriorated.
  - .No rusted or damaged metal counter flashing.
  - .Pitch pockets not depressed or low.
- 6.03 Miscellaneous:
  - .Proper drainage.
  - .No evidence of ponding.
  - .No spots of vegetation growth.
  - .Inspector should observe for debris, general deterioration, and/or indications of punctures.
  - .Coping and parapet in good condition.

## 7. LANDSCAPING AND GROUNDS--CLASSIFICATION 3

## 7.01 Landscaping:

.No dead or diseased trees and shrubs.

- .Trees and shrubs properly pruned.
- .Limbs do not interfere or rub on wires or buildings.
- .Because of potential damage to exterior surfaces, vines on buildings should be reported.
- .Lawn areas--Conditions do not indicate the need for repairs, such as resodding, regrading, etc.

#### 7.02 Grounds:

.Ground areas--No evidence of erosion, poor drainage or improper grading.

## 8. WALLS, PARTITIONS, DOORS, AND CEILINGS--CLASSIFICATION 4

## 8.01 Walls:

- .No cracks and/or evidence of moisture penetrations at exterior walls.
- .Paint--No blisters, chalking, checking, peeling, soiled areas, etc.
- .No cracks, deteriorated joints, etc, in marble, tile, travertine, or other masonry.
- .No cracked or loose plaster.

### 8.02 Partitions:

- .No loose, cracked, or broken panels of partitions.
- .No cracked, loose, or broken door or partition glass.

## 8.03 Doors:

- .No defective or missing door hardware.
- .Doors close properly (closer in adjustment).

## 8.04 Ceilings:

- .No damaged tile.
- .Metal support work not damaged.
- .Does not require repainting, etc.

## 9. FLOOR COVERING--CLASSIFICATION 5

### 9.01 General:

- . Does not show excessive wear.
- .No missing, cracked, or broken tile.
- .No tripping hazards created by loose covering.
- .No indentations.
- .No ripped or loose carpet.

## 10. APPURTENANCES--CLASSIFICATION 6

10.01 General: This category includes such items as stairway hardware, diesel exhaust stacks, building mounted antennas, fences, entry point gratings, downspouts and gutters, hoisting beams or apparatus, roofing ventilators and rest room fixtures:

- .No loose or inadequately mounted hardware or apparatus.
- .Not deteriorated and/or inadequately painted.
- .No low spots or blocked gutters.
- .No safety hazards involving any equipment listed in this paragraph.
- .Weight capacity properly stenciled on the hoisting beams.

## 11. SIDEWALKS, DRIVES, AND PAVING--CLASSIFICATION 7

## 11.01 General:

- .No spalled surfaces.
- .No uneven surfaces (tripping hazards).
- .No cracks and deteriorated joints.
- .Expansion joints not loose or deteriorated.
- .No deteriorated caulking or seal adjacent to the building.
- .No deteriorated and/or inadequately sealed asphalt.

# 12. WINDOWS, FRAMES, AND WINDOW TREATMENTS--CLASSIFICATION 8

## 12.01 Windows:

.No loose, cracked, or broken glass.

### 12.02 Frames:

- .No defective hardware.
- .No defective or missing weather stripping.
- .No deterioration of window frames or lintels.

### 12.03 Window Treatments:

- .No defective or damaged venetian blinds or shades.
- .No loose or improperly mounted venetian blinds, shades, or drapery hardware.
- .Drapes hung properly.

## 13. SUMMARY

- 13.01 The following is a summary of the overall inspection and quality measurement process.
  - .Fill in the general data regarding the building on Form SW-6482.
  - .Walk through the building, noting all deviations on the checklist.
  - .Review the checklist, completing all spaces. (Ensure that all items are checked.)
  - .Enter numerical ratings in the Quality Rating (Q.R.) column for all classifications rated.

- .Multiply each Q.R. by the assigned weighting factor (WF) and enter the resultant figure in the Quality Value (Q.V.) column.
- .Add the WF's of all classifications rated.
- .Total the individual Q.V.'s and enter in the Total Q.V.
- .Divide the Total Q.V. by the Total W.F. and enter the result in the Quality Index space.
- .Enter in the Band space the alphabetical band (H, O, L, or U) which corresponds to the numerical Quality Index.
- .Note any unusual conditions on the bottom of the form that contribute to a low quality value.

(A) Southwestern Bell

## EXHIBIT 1

## BUILDING MAINTENANCE INSPECTION

Retain 1 year, until <u>superce</u> ded (REF B.S.P. 770-200-900SW)			Date	<u> </u>	
BUILDING MAINT	ENANC	E INSPECT	ION		
Building Name BIG CENTRAL OFFICE		н	0	L	_
Address /23 ROAD		igher Than Objective	Objective Band	Lower Object	
		10.0—8.6	8.5—8.0	7.9-	-6
City & State Home Town, Missouri		Classil	ication	Q.R.	
Geo. Loc. Code <u>27000</u>	1	Structural		7.8	
Sector/Zone 2/ CENTRAL	2	Roof		8.3	
Bldg. Sq. Ft. 10, 824 Bldg. Group 2	3	Landscapin	g And Grounds	7.5	
<b>Building Maintenance Information</b>	4	Walls, Door Ceilings	rs, Partitions,	8.3	
If In-house, Est. Work Hrs./Mo.	5	Floor Cove	rings	8.3	
If Contract, Est. Contract Cost/Mo. 355	6	Appurtenar	nces	8.3	

Q.R. — Quality Rating (Use Tenths)
Q.V. — Quality Value (Use Hundredths)
W.F. — Weighting Factor

	н о		L		U	
Higher Than Objective Objective Band		Lower Than Objective		Unsatisfactory Band		
10.0—8.6 8.5—8.0		7.9—6.0		5.90		
Classification		Q.R. W		Q.V.		
1	1 Structural		7.8	2.5	19.50	
2	2 Roof		8.3	2.0	16.60	
3	3 Landscaping And Grounds		7.5	1.0	7.50	
4	Walls, Doors, Partitions, Ceilings		8.3	1.0	8.30	
5	5 Floor Coverings		8.3	1.0	8.30	
6	6 Appurtenances		8.3	1.0	8.30	
7	7 Sidewalks, Drives, Paving		7.8	1.0	7-80	
8 Windows, Frames. Treatment		8.3	.5	4.15		
		To	otal W.F.	10		
Total Q.V.				$\supset$	80.45	

Date\_\_6-6-83

Quality index =  $\frac{\text{Total Q.V.}}{\text{Total W.F.}}$  = Band

Note Any Unusual Condition Below

FRONT YARD, CABLE CONSTRUCTION WORK IN PROGRESS.

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## EXHIBIT 1 (Cont.)

Southwestern	Bel
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BUILDING MAINTENANCE CHECKLIST

(6-63) Part II

Retain 1 year, until superceded

Check items As Indicated Status ( Dev., O.K., N/A)

BIG. BIG CENTRAL OFFICE Floor 1. STRUCTURAL STATUS LOCATION, NOTES, ETC. .01 Masonry No Open Joints oκ No Struct. Cracks, Ext. Walls No Struct. Cracks, Terra Cotta, Etc. No Struct. Cracks, Floor Slabs Brick Wails, Free Spalling No Loose Masonry No Efflorescence .02 Steelwork SEE NOTES 112 Rust Free OK Corrosion Free No Damaged Members OK Adequate Exposure Protection .03 Foundation Walls No Water, Moisture Penetration OK Free Spalling, Cracks, Shifting No Evidence Poor Drainage OK .04 Towers Rust, Corrosion Free N/A No Loose Nuts, Bolts, Etc. <u>N/A</u> STATUS 2. ROOF .01 Membrane No Bare Spots (Gravel) OK No Fish Mouths No Blisters No Alligatoring No Ruptures No Splits .02 Flashing, Metal, Pitch Pockets οK No Stretched Flashing Base Flashing Not Punctured Felt Stripping Not Deteriorated No Rusted, Damaged Counter Flashing Pitch Pockets Not Low .03 Miscellaneous No Ponding, Vegetation Growth No General Deterioration Coping, Parapet Good Condition 3. LANDSCAPING, GROUNDS STATUS .01 Landscaping No Dead Trees Or Shrubs OK Proper Pruning Trees Or Shrubs Limbs, Vines Not On Bldg. No Lawn Resodding Required .02 Grounds No Erosion, Poor Drainage 6 HOLES IN FRONT YARD SAFETY

NOTES 1. AIR CONDITIONING CONDENSOR LOCATED ON THE ROOF & METAL SUPPORTS RUBTY
2. REAR EXIT METAL STEPS & HANDRAIL RUSTY

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4. WALLS, PARTITIONS,	STA	TUS	LOCATION, NOTES, ETC.
DOORS, CEILINGS	0		
.01 Walls		$\overline{}$	
No Cracks, Moisture, Exterior	01	区	
Paint Good Condition	1		
No Cracks, Marble, Tile, Etc.			
No Cracked, Loose Plaster			
No Drywall Patching Req.	V		
.02 Partitions	>	<	
No Loose, Cracked, Broken Panels	NI	<u>a</u>	
No Loose, Cracked, Broken Glass	1		
Paint Good Condition	<b>V</b>		
.03 Doors		~	
No Defective, Missing Hardware	Ok	$\overline{}$	Angue
Doors Close Properly		K	
Paint, Good Condition	V		PAINT ON 15T FLOOR MEN'S REST ROOM DOOR W
.04 Ceilings	Ś	~	The state of the s
No Damaged Tile	01	<u>~</u>	
Metal Support Good Condition	0		
Paint Good Condition	0		
5. FLOOR COVERING	STA		
.01 General	<u> </u>	=	
No Excessive Wear	0	V	
No Missing, Broken Tile		_	
No Tripping Hazards	1		
No Indentations			
No Ripped Loose Carpet	1	<del>,                                     </del>	
6. APPURTENANCES	STA		
.01 General		=	
No Loose Hardware, Apparatus	0	K	
Hardware, Etc., Adequately Painted	\ <u>\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ </u>	_	
No Low, Damaged Gutters		-	•
No Safety Hazards	1		
Hoisting Beams Weight Stenciled	$\vdash$		
Bathroom Fixtures Good Condition	1	,	
7. SIDEWALKS, DRIVES, PAVING	<del>  </del>	TUS	
.01 General	<u> </u>	-	
No Spalled, Uneven Surfaces	1	_	SIDEWALK TO FRONT BLOG ENT. SPALLED & LINE
No Cracks, Bad Expansion Joints	-	K	MINERALL TO PROMI DELIG ENT. OFFICE OF COME
No Bad Caulking Seal At Bidg.	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		
	1	-	
Asphait Adequately Sealed  8. WINDOWS, FRAMES, TREATMENT	<b>├</b> ─	TUS	
.01 Windows	<b> </b>		
· · · · · · · · · · · · · · · · · · ·		K	
No Loose, Cracked Glass .02 Frames	٣	<u>~</u>	
No Defective Hardware	0	~	
No Defective naroware  No Defective, Missing Weather Stripping		$\overline{r}$	
No Deteriorated Frames, Paint	1	<del>,                                     </del>	
<del></del>	<b></b>	_	
.03 Window Treatment	<b></b>	10	
No Damaged V. Blinds, Shades	<del>                                     </del>	<u>IA</u>	
Tape, Cords Good Condition	1		1

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