APPENDIX A
HOMEOWNER/OCCUPANT LETTER

September 15, 1999

«First_Name» «Middle_initial» «Last_Name»
«First_Name1» «Middle_initial1» «Last_Name1»
«Address»
«City», «State» «Zip»

D*ear Sir or Madam:*

In order to improve the design, construction, and durability of tomorrow's housing, we need to know the successes and failures of yesterday's homes. As part of discovering these successes and failures, the U.S. Department of Housing and Urban Development (HUD) has asked the NAHB Research Center, Inc. (NAHB-RC) in Upper Marlboro, Maryland to conduct an evaluation of existing housing in the United States. As part of a pilot study in the Mid-Atlantic Region, we have randomly selected your house at «Address» to be included. However, your participation in this study is strictly voluntary.

Within the next two weeks, an NAHB-RC engineer will attempt to contact you via telephone to request your participation, and to obtain some general information about your home. They then will be conducting a visual inspection of the exterior of your house. This exterior survey will be enhanced if the inspector can walk around the property and examine all sides of the house. If you would prefer to call us, you may contact _____ of the NAHB Research Center at 800-638-8556 or 301-249-4400.

The NAHB Research Center, Inc. is an independent, not-for-profit, research organization, and they are not associated with any regulatory, code, or tax assessment agency.

The survey results will be solely used as data for a general overall condition assessment of single-family housing, and will be blind to individual property addresses. Any information you provide will be kept strictly confidential.

If you are interested in the results from this study, let us know, and we will include you in the final report distribution. If there are any concerns or question regarding this research please feel free to call me at 202-708-4370 x 5725, or NAHB-RC at 800-638-8556.

In advance, I thank you for your participation in this research.

Sincerely,

William Freeborne

William E. Freeborne
Program Analyst

APPENDIX B
HOMEOWNER/OCCUPANT SURVEY FORM

CONDITION ASSESSMENT SURVEY FORM
Phase I, Owner Survey

Report Date _____ Inspection ID # _____

INSPECTION ADDRESS: _____
_____

OWNER INFORMATION:
Name: _____
Phone Number:____(____) - ____-_____ Home:____(____) - ____-_____
Owner Occupied: ____ (Y/N)

1.) How long have you owned the house _____

2.) Last maintenance on the following areas, if known (please list approximate year or date if within the last 12 months).

Component	Replacement year - Date	Comments
Siding replacement		
Roofing		
Painting		
Caulking/Sealants		
Windows		
Doors		
Flashings		
Gutters/Downspouts		

3.) Any problems with the house?
(Please list items with brief notes, such as "Patched roof after noting damp ceiling")

- Foundation cracking or settlement?
- Any water leakage or standing in basement or crawlspace?
- Noticed water stains around window casings?

_____
_____
_____

4.) Any damage by natural causes?

Yes/No	Natural Cause	Insurance Claim (Yes/No)	Approx Cost $	Approximate Year
	Wind			
	Hail			
	Flooding			
	Fire			
	Termites/Bugs/Ect			
	Other			

5.) Any injuries directly attributable to the house?
(Please list items with brief notes, such as "Broke arm when fell down the stairs".)

_____
_____

6.) May we arrange a time to enter the property to conduct a detailed visual exterior inspection?
When _____ Do you want to be present? _____

7.) Do you have an unfinished basement or crawlspace?

APPENDIX C
SITE CONDITION ASSESSMENT FORM

Report Date _____

INSPECTION ADDRESS: _____

_____

REPORTED AGE: _____ DATE PURCHASED_____ PHOTO Roll ___ # ___
NOTED REPLACEMENT OF ROOFING, SIDING OR
WINDOWS_____WHEN_____
FRONT OF HOUSE FACES: _____ GENERAL DESCRIPTION: _____

DRAW PLAN VIEW OF THE PROPERTY:

PLEASE INCLUDE:
APPROXIMATE SHAPE OF STRUCTURE
APPROXIMATE LOCATIONS OF VISIBLE DAMAGE
SHIELDING FROM BUILDINGS / TREES
SIDEWALKS / DRIVEWAYS
GARAGES/ CARPORTS
NORTH DIRECTION VECTOR
DOORS; FRONT, REAR
DORMERS
APPURTENANCES, PORCHES, CHIMNEYS

Type of House

SINGLE FAMILY ____ MULTIFAMILY ___ ATTACHED ___ DETACHED ___

RANCH ___ COLONIAL ___ TUDOR ___ TOWNHOUSE ___ OTHER ___

NUMBER OF STORIES: 1 ___ 1 ½ ___ 2 ___ 2 ½ ___ 3___

GARAGE ___ (Y/N) ATTACHED ___ DETACHED ___

BASEMENT ___ CRAWLSPACE ___ SLAB-ON-GRADE ___ UNDETERMINED ___

SITE CONDITIONS

GENERAL GRADING:

SIGNS OF PONDING ___ SURFACE DEPRESSIONS ___

LANDSCAPING:

WITHIN 10' ____ (Y/N)

LARGE TREES ___ LARGE SHRUBS ___ COMMENTS _____

FLOWER BEDS ___ WOOD MULCH ___

PATIO SLABS:

PRESENT ___ (Y/N) ATTACHED ___ UN-ATTACHED ___ 2% = ¼" IN 1 FT

IMPERVIOUS ___ PERVIOUS ___ ≥ 2% SLOPE ___ < 2% ___ NEG ___ COMMENTS_____

TYPE: BRICK ____ BLOCK____ CONCRETE _____ OTHER _____

CONDITION: GOOD ___ ADEQUATE ____ POOR ___ DESCRIPTION _____

RETAINING WALLS: PRESENT ___ (Y/N) APPROXIMATE HEIGHT ____ MATERIAL _____

CONDITION: GOOD ___ ADEQUATE ____ POOR ___ DESCRIPTION _____

DRIVEWAYS/PARKING: PRESENT ___ (Y/N)

OFF STREET ___ (Y/N) PERVIOUS ___ (Y/N) DISTANCE FROM HOUSE <10' __ ≥ 10'___

CONDITION GOOD ___ ADEQUATE ____ POOR ___ DESCRIPTION _____

SIDEWALKS: PRESENT ___ (Y/N) PERVIOUS ___ (Y/N) SLOPE ≥ 2% ____ < 2% _____

WIND EXPOSURE RATING ____ (A, B, C, OR D) (ASCE 7)

DEGREE OF WIND SHIELDING: EXCELLENT ___ NORMAL ____ POOR____

FOUNDATION

MATERIAL: BRICK ____ BLOCK ____ CONCRETE ____ PIER ____ OTHER _____

VISIBLE EXTERIOR CRACKS ___ (Y/N) WINDOW WELLS ___ (Y/N) COVERED ___ (Y/N)

WALK OUT BASEMENT ___ (Y/N) STAIRWELLS ___ (Y/N)

STAIRWELL CONDITION: GOOD ___ ADEQUATE ____ POOR ___ DESCRIPTION _____

TYPE AND CONDITION OF EXTERIOR ENVELOPE

SIDING:

TYPE: BRICK___ VINYL ___ ASBESTOS-CEMENT ___ WOOD ___ ALUMINUM ___ STUCCO ___

DESCRIPTION _____

INSTALLATION: HEIGHT ABOVE FINISH GRADE < 6" ___ ≥ 6" ___ COMMENTS _____

ROOF:

TYPE: GABLE ___ HIP ___ GAMBREL ___ SHED ___ OTHER _____

PITCH OF ROOF <3/12 ___ 3 TO 6 IN 12 ___ > 6/12 ___

ROOF COVERING: COMPOSITION ___ WOOD ___ SLATE ___ TILE ___ BUILT-UP ___

ASPHALT SHINGLES ___ METAL ___ OTHER ___

COMMENTS _____

NUMBER OF VALLEYS ____

GENERAL VALLEY CONDITION(S): GOOD ___ ADEQUATE ___ POOR ____ DESCRIPTION _____

NUMBER OF ROOF OPENINGS ____

GENERAL OPENING CONDITION(S): GOOD ___ ADEQUATE ___ POOR ____ DESCRIPTION _____

NUMBER OF SKYLIGHTS ____

GENERAL SKYLIGHT CONDITION(S): GOOD ___ ADEQUATE ___ POOR ____ DESCRIPTION _____

VENTS: GABLE ___ RIDGE ___ SOFFIT ___ PLUMBING ___ THROUGH ROOF (FAN ___ TURBINE ___ PASSIVE __)

ROOF FLASHING: ROOFING DRIP EDGES ___ (Y/N), SPACED < ¼" ___ ≥ ¼" ____

SOFFITS: TYPE , WOOD ___ METAL ____ VINYL ___ OTHER _____

SLOPE: HORIZONTAL ___ ANGLED _____ IF ANGLED APPROXIMATE SLOPE _____

OVERHANG: LENGTH OF OVERHANG 0" ___ 0-6" ___ 6-12" ___ 12-18" ___ 18-24" ____ > 24" ____

SAME FOR ALL LOCATIONS ___ (Y/N)

GUTTER/DOWNSPOUT: PRESENT ON ALL ROOFS ___ (Y/N) SIGNS OF RECENT MAINTENANCE ___ (Y/N)

MATERIAL: ALUMINUM ___ STEEL ___ COPPER ___ PLASTIC ___ OTHER _____

SPLASH BLOCKS / RUN-OFF PROVISIONS ___ (Y/N) WATER FLOW DIRECTED 2' MINIMUM ___ (Y/N)

COMMENTS _____

WINDOWS: MATERIAL: WOOD ___ METAL ___ VINYL ___ OTHER _____

GLAZING: SINGLE ___ DOUBLE ___ TRIPLE ___ OTHER _____

CONDITION: GOOD ___ ADEQUATE ___ POOR ____ DESCRIPTION _____

STORM WINDOWS: NOT PRESENT ___ WOOD ___ METAL ___ VINYL ___ OTHER _____

CONDITION: GOOD ___ ADEQUATE ___ POOR ____ DESCRIPTION _____

DOORS: (F = FRONT, R = REAR)

MATERIAL: WOOD ___ METAL ___ VINYL ___ OTHER _____

CONDITION: GOOD ___ ADEQUATE ___ POOR ____ DESCRIPTION _____

STORM DOORS: NOT PRESENT ___ WOOD ___ METAL ___ VINYL ___ OTHER _____

CONDITION: GOOD ___ ADEQUATE ___ POOR ____ DESCRIPTION _____

DECKS , DECK PRESENT ___ (Y/N)

MATERIAL: TREATED WOOD ___ REDWOOD ___ CEDAR ___ CAN'T TELL ___ OTHER _____

SURFACE NAILED ___ SURFACE SCREWED ___ OTHER _____

CONDITION: GOOD ___ ADEQUATE ___ POOR ____ DESCRIPTION _____

FENCING PRESENT ___ (Y/N)

TYPE, WOOD ___ METAL ___ PLASTIC ___ , DESCRIBE _____

CONDITION: GOOD ___ ADEQUATE ___ POOR ____ DESCRIPTION _____

PORCH/STOOP

MATERIAL: WOOD FRAME ___ CONCRETE ____ COVERED ____ OTHER _____

CONDITION: GOOD ___ ADEQUATE ___ POOR ____ DESCRIPTION _____

EXTERIOR STAIRS

MATERIAL: WOOD FRAME ___ CONCRETE ____ METAL ___ OTHER _____

CONDITION: GOOD ___ ADEQUATE ___ POOR ____ DESCRIPTION _____

CHIMNEY STORM CAP: _____ (Y/N)

CONDITION: GOOD ___ ADEQUATE ___ POOR ____ DESCRIPTION _____

FASCIAS

MATERIAL: WOOD ___ METAL ___ VINYL ___ OTHER _____

CONDITION: GOOD ___ ADEQUATE ___ POOR ____ DESCRIPTION _____

WOOD ROT (INSECT DAMAGE, TERMITE, ETC.)

Any Wood Rot Noted ___ (Y/N)

If Yes, Describe Location(s) and Probable Cause(s): _____

Any Insect Damage Noted ___ (Y/N)

If Yes, Describe Location(s) and Probable Cause(s): _____

BUILDING COMPONENT CONDITION VISUAL SURVEY*

CONDITION RATINGS, 1 = EXCELLENT, 2 = GOOD, 3 = ADEQUATE, 4 = POOR, 5 = NEEDS REPLACED, 6 = NA

BUILDING SIDE	FRONT	RIGHT	REAR	LEFT	Comments
COMPONENT CONDITIONS					**House Road Side Faces N S E W**
GRADING					
LANDSCAPING					
SIDEWALKS					
FOUNDATION					
PORCHES					
DECKS					
SIDING					
DOORS					
WINDOWS					
TRIM					
OPENINGS					
SOFFITS					
FASCIA					
GUTTERS					
FLASHING					
ROOF					
CAULKING					
FASCIA/SOFFIT					
SIDING/SOFFIT					
SIDING/TRIM					
SIDING/WINDOWS					
SIDING/DOORS					
SIDING/OPENINGS					
PAINT					
FASCIA					
SOFFIT					
SIDING					
TRIM					
WINDOWS					
DOORS					

*NOTE: Refer to Appendix D for a detailed description of the numeric rating system.

APPENDIX D
RATING SYSTEM

Rating System Description for: Building Component Condition Visual Survey
CONDITION RATINGS, 1 = EXCELLENT, 2 = GOOD, 3 = ADEQUATE, 4 = POOR, 5 = NEEDS REPAIRED 6 = NA

BUILDING SIDE	FRONT	RIGHT	REAR	LEFT	Comments
COMPONENT CONDITIONS					**House Road Side Faces N S E W**
GRADING					

Scope: The grading is associated with the drainage characteristics of the first 10 ft of the ground in an area encompassing the 10 feet perpendicular and adjacent to the foundation.

Importance: The slope of the finish grade in the 10 feet adjacent and perpendicular to the foundation establishes and promotes proper surface drainage for the bulk water away from the structure. This region is particularly important to proper drainage because it is both the area that was excavated and back filled during construction (thereby being more porous) and any additional water surcharge load is proportionally added to lateral structural loads resisted by the foundation. Saturation of the soil in this region can also hasten any decay being present, raise the micro-environment relative humidity, encourage insect growth, and many more problems. As a first defense for these and other potential problems the bulk water needs to be removed from this region within 10-foot promptly.

CONDITION RATING DESCRIPTIONS:

1.	EXCELLENT

SLOPE 5% (5/8" PER FOOT) OR GREATER AWAY FROM THE STRUCTURE A MINIMUM OF 10' ADJACENT AND PERPENDICULAR

NO VISIBLE DEPRESSIONS FOR STANDING WATER FOR THE ENTIRE PERIMETER AREA

2	GOOD

SLOPE 5% OR GREATER THAN 4' ADJACENT AND PERPENDICULAR FROM THE FOUNDATION THEN, POSITIVE A MINIMUM OF

10 ' TOTAL ADJACENT AND PERPENDICULAR FROM THE FOUNDATION

EITHER PROPERLY DRAINED OR NO VISIBLE DEPRESSION FOR STANDING WATER WITHIN 10' FOR THE ENTIRE PERIMETER.

SLOPE 2% TO 5% 10' ADJACENT AND PERPENDICULAR FROM THE FOUNDATION.

EITHER PROPERLY DRAINED OR NO VISIBLE DEPRESSION FOR STANDING WATER WITHIN 10' FOR THE ENTIRE PERIMETER

3	ADEQUATE

POSITIVE SLOPE 0 TO 2% 10' ADJACENT AND PERPENDICULAR FROM THE FOUNDATION.

LESS THAN 1 FT^2 OF WATER RETAINING DEPRESSIONS PER 10 LINEAR FOOT OF WALL

4	POOR

LEVEL SLOPE WITH IN THE 4' ADJACENT AND PERPENDICULAR FROM THE FOUNDATION

BETWEEN 1FT^2 AND 5 FT^2 OF WATER RETAINING DEPRESSIONS PER 10 LINEAR FOOT OF FOUNDATION

LESS THAN 1 FT^2 PER 20 LINEAR FOOT OF FOUNDATION SLOPED BACK TOWARD THE FOUNDATION

5	NEEDS REPAIR

SLOPE NEGATIVE TO LEVEL FOR MORE THAN 1FT^2 PER 20 LINEAR FEET OF FOUNDATION

GREATER THAN 5FT^2 OF WATER RETAINING DEPRESSIONS PER 10 LINEAR FOOT OF WALL

LANDSCAPING					

Scope: Landscaping is focused on the plantings that are within a 10' zone around and above the structure.

Importance: plantings can pose potential problems to the structure ranging from roots pushing on and below the foundation to the watering for the plants creating wet basements and high relative humidity micro-climates to falling trees and limbs introducing large impact loads. The main issues with respect to durability are:

- Air movement around the structure to promote evaporation.
- Air movement to crawl-space vents for proper ventilation
- Large trees a minimum of 10 feet away to minimize impact due to root growth.
- A means to help stabilize the moisture content of the soil within the first 10", either shrubs, grass, impermeable barrier, or bushes.
- Minimizing the introduction of excessive additional water into the region.

1	EXCELLENT

ALL BUSHES AND PLANTINGS ARE A MINIMUM OF 1 FOOT FROM FOUNDATION VENTS

A MINIMUM OF 6" SEPARATION OF ALL FOLIAGE FROM THE SIDING.

LARGE TREES (GREATER THAN 12' TALL) ARE A MINIMUM OF 10' AWAY FROM THE STRUCTURE

ANY WOOD MULCH IS A MINIMUM OF 6 INCHES AWAY FROM THE SIDING

WELL DRAINED PLANTINGS WITHOUT SIGNS OF EXCESSIVELY MOIST SURROUNDINGS WITHIN 10' OF STRUCTURE.

2	GOOD

ALL BUSHES AND PLANTINGS ARE A MINIMUM OF 6 INCHES FROM FOUNDATION VENTS

A MINIMUM OF 6" SEPARATION OF ALL FOLIAGE FROM THE SIDING.

LARGE TREES (GREATER THAN 12' TALL) ARE A MINIMUM OF 10' AWAY FROM THE STRUCTURE

LESS THAN 1 SMALL TREE (LESS THAN 12' TALL) PER 20 LINEAR FOOT OF FOUNDATION WITHIN 10' OF STRUCTURE

WOOD MULCH IS A MINIMUM OF 6 INCHES AWAY FROM THE SIDING

NO PLANTINGS WITH SIGNS OF EXCESSIVELY MOIST SURROUNDINGS WITHIN 6' OF STRUCTURE

3	ADEQUATE

ALL BUSHES AND PLANTINGS ARE A MINIMUM OF 6 INCHES FROM FOUNDATION VENTS.

A MINIMUM OF 6" SEPARATION OF ALL FOLIAGE FROM THE SIDING AT LEAST 90% OF THE STRUCTURE.

LARGE TREES (GREATER THAN 12' TALL) ARE A MINIMUM OF 10' AWAY FROM THE STRUCTURE.

LESS THAN 1 SMALL TREE (LESS THAN 12' TALL) PER 10 LINEAR FOOT OF FOUNDATION WITHIN 10' OF STRUCTURE.

ANY WOOD MULCH IS A MINIMUM OF 6 INCHES AWAY FROM THE SIDING.

NO PLANTINGS WITH SIGNS OF EXCESSIVELY MOIST SURROUNDINGS WITHIN 4' OF STRUCTURE.

4	POOR

ALL BUSHES AND PLANTINGS ARE A MINIMUM OF 1 FOOT FROM FOUNDATION VENTS

A MINIMUM OF 6" SEPARATION OF ALL FOLIAGE FROM THE STRUCTURE AT LEAST 75% OF THE STRUCTURE.

LARGE TREES (GREATER THAN 12' TALL) ARE A MINIMUM OF 10' AWAY FROM THE STRUCTURE

LESS THAN 2 SMALL TREES (LESS THAN 12' TALL) PER 10 LINEAR FOOT OF FOUNDATION WITHIN 10' OF STRUCTURE

NO PLANTINGS WITH SIGNS OF EXCESSIVELY MOIST SURROUNDINGS WITHIN 2' OF STRUCTURE

5	NEEDS REPAIR

FOUNDATION VENTS ARE COVERED WITH VEGETATION.

LESS THAN 6" SEPARATION OF ALL FOLIAGE FROM THE SIDING FOR MORE THAN 25% OF THE STRUCTURE.

LARGE TREES WITHIN 10' AWAY FROM THE STRUCTURE.

MORE THAN 2 SMALL TREES (LESS THAN 12' TALL) PER 10 LINEAR FOOT OF FOUNDATION WITHIN 10' OF STRUCTURE.

WOOD MULCH IS A LESS THAN 6 INCHES AWAY FROM THE SIDING.

PLANTINGS WITH SIGNS OF EXCESSIVELY MOIST SURROUNDINGS WITHIN 2' OF STRUCTURE.

FOUNDATION					

SCOPE: THE CONDITION SURVEY OF THE FOUNDATION IS INTERESTED IN THE EXTERIOR CONDITION OF THE FOUNDATION AND ITS STRUCTURAL INTEGRITY.

IMPORTANCE: THE FOUNDATION IS THE SUPPORT FOR THE STRUCTURE. IT NEEDS TO BE ABLE TO SUPPORT THE STRUCTURE WITH A MINIMUM OF DEFLECTION AND CRACKING. DISTRESS IN THE FOUNDATION IS GENERALLY SEEN IN AREAS OF RE-ENTRANT CORNERS, FOUNDATION CORNERS, LOCATION OF SETTLEMENTS, AND OPENINGS FOR UTILITIES.

1	EXCELLENT

NO VISIBLE EXTERIOR CRACKS.

ALL MORTAR PROPERLY TOOLED AND IN GOOD CONDITION.

FOUNDATION SQUARE AND PLUMB.

NO NOTICEABLE BULGES.

NO ROT OR DECAY OF WOOD COMPONENTS.

NO EFFLORESCENCE.

ALL TIE HOLES PATCHED.

CRAWLSPACE VENTILATION PROPERLY SCREENED AND UNOBSTRUCTED.

2	GOOD

CRACKS FROM RE-ENTRANT CORNERS SHORTER THAN 2 TIMES THE WALL THICKNESS

ALL CRACKS LESS THAN 1/32" (.03125")

NO CRACKS IN CONTACT WITH THE FINISH GRADE

EFFLORESCENT ON CONCRETE / MASONRY EXTENDS ≤ 1" ABOVE FINISH GRADE

NO ROT OR DECAY OF WOOD COMPONENTS.

≥ 50% OF ALL TIE HOLES PATCHED

MORTAR IS SOUND

NO MASONRY SPALLING

3	ADEQUATE
FOUNDATION CRACKS ARE LESS THAN 1/32" (0.03125") WIDE AT GROUND LEVEL NO NOTICEABLE SEPARATION OF THE FOUNDATION AT OR AROUND OPENINGS NO VISIBLE ROT OR DECAY, ESPECIALLY AROUND THE CRAWLSPACE ACCESS, EXTERIOR BASEMENT ENTRANCE, OR BASEMENT WINDOWS. CRAWLSPACE VENTILATION OF APPROXIMATELY 1/150TH OF THE FOOTPRINT. EFFLORESCENT'S DO NOT EXTEND MORE THAN 2" ABOVE THE FOUNDATION NO LOOSE MASONRY UNITS	
4	POOR
CRACKS' RADIATING OUT OF RE-ENTRANT CORNERS ≥ 4 TIMES THE THICKNESS. CRACK WIDTHS ≥1/32 " MORTAR CRACKS AND MASONRY SPALLING ON < 10% OF VISIBLE MASONRY EFFLORESCENT NOTED > 3" ABOVE FINISH GRADE. STABLE SETTLEMENT CRACKS ≤ ¼" AT WIDEST VISIBLE POINT. FOUNDATION ≤ ½" IN 4' OUT OF PLUMB. BULDGE ≤ ¼" PER WALL	
5	NEEDS REPAIR
CRACKS RADIATING OUT OF RE-ENTRANT CORNERS ≥ 5 TIMES THE THICKNESS CRACK WIDTHS ≥ ½" MASONRY LOOSE ON > 5% OF THE VISIBLE AREA FOUNDATION > ½" IN 4' OUT OF PLUMB BULGE > ¼" PER WALL EFFLORESCENT > 5" ABOVE FINISH GRADE ACTIVE SETTLEMENT CRACKS > ¼" IN-ACTIVE SETTLEMENT CRACKS > ½" MASONRY SPALLING > 10% OF VISIBLE AREA > 20% OF MORTAR BED JOINTS GONE.	

SIDING					
SCOPE: THE SIDING ASSESSMENT IS FOCUSED ON THE CONDITION OF THE SIDING. REGARDLESS OF THE TYPE OF SIDING SYSTEM (FACE SEALED OR WIND SCREEN) THE REGIONS OF EARLIEST DEGRADATION ARE GENERALLY THE END BUT REGIONS, THE AREA CLOSEST TO THE FINISH GRADE, AND ANY INTERFACES WITH INTERFACES AND FEATURES.					
PURPOSE: THE SIDING SERVES TO SHED THE BULK WATER. BULK WATER GENERALLY IS DELIVERED AS RAIN BY WIND OR SPLASHING BUT CAN ALSO BE FROM SPRINKLERS FOUNTAINS ETC. THIS IS ONE OF THE LARGEST AND MOST IMPORTANT COMPONENTS IN THE BUILDING ENVELOPE. DEGRADATION MAY BE SEEN AS DECAY/ROT, LOCALIZED OR GROSS DEFORMATION, SPALLING, AND CRACKING, ECT. THE FUNCTIONAL REQUIREMENT IS TO DIRECT THE BULK WATER AWAY FROM THE STRUCTURE.					
1	EXCELLENT				

ALL SIDING IS IN PLACE SIDING IS > 6 INCHES ABOVE THE FINISH GRADE NO VISIBLE ROT/DECAY GOOD OVERLAP, INTERLOCK, SURFACE FINISH, MORTAR TOOLING ECT NO SURFACE FUNGUS GROWTH. SURFACES ARE SQUARE AND PLUMB	
2	GOOD
ALL SIDING IS IN PLACE SIDING IS > 6 INCHES ABOVE THE FINISH GRADE NO VISIBLE ROT/DECAY GOOD OVERLAP, INTERLOCK, MORTAR TOOLING ETC. SIDING IS LESS THAN 1/8" IN 4' OUT OF PLUMB WALL BULGES OF LESS THAN 1/2".	
3	ADEQUATE
ALL SIDING IS IN PLACE SIDING IS ≥ 6 INCHES ABOVE THE FINISH GRADE VISIBLE ROT/DECAY AT BUTT JOINTS ≤ 5% OF JOINTS, SUBSTRATE STILL SOUND. VISIBLE ROT/DECAY AT INTERFACES ≤ 5% OF LINEAR SEALS OF INTERFACES. SIDING IS LESS THAN ¼" IN 4' OUT OF PLUMB WALL BULGES OF LESS THAN 1". SIDING MAY BE FACE NAILED AND PAINTED/SEALED.	
4	POOR
< 1% OF THE SIDING MISSING FROM PROTECTED AREAS. SIDING IS LESS THAN 6" ABOVE THE FINISH GRADE. SIDING IS RUST STAINED ROT NOTED ON ≤ 15% OF THE END JOINTS AND INTERFACES BUT SIDING IS STILL SOUND. EITHER NO OR OBSTRUCTED WEEP HOLES (MASONRY, PURE WIND SCREENS) SIDING IS LESS THAN ½" IN 4' OUT OF PLUMB WALL BULGES OF LESS THAN 1 ½".	

5	NEEDS REPAIR

LESS THAN 1% OF SIDING MISSING

SIDING IS IN CONTACT WITH THE FINISH GRADE.

DECAY PROGRESSION AROUND NAIL HOLES SUCH THAT WATER INTRUSION IS ALLOWED.

ROT NOTED ON > 15% OF THE END JOINTS AND INTERFACES OR SIDING SUBSTRATE IS NO LONER SOUND.

SIDING IS BOWED AND/OR WARPED ALLOWING WATER INTRUSION.

PORCHES					

SCOPE: PORCHES ARE INTERESTED IN THE CONDITION OF EITHER CONCRETE STOOPS OR COVERED PORCHES. THE MAIN POINT OF INTEREST IS TO ASSESS THE OVERALL CONDITION IN TERMS OF STRUCTURAL ABILITY TO SUPPORT THE OCCUPANTS AND THE ABILITY TO DIRECT THE BULK WATER AWAY FROM THE STRUCTURE.

IMPORTANCE: PORCHES ARE THE ENTRANCE STAGING AREAS DIRECTLY ATTACHED AND/OR ADJACENT TO STRUCTURES. THEY ARE OFTEN IMPROPERLY CONSTRUCTED SUCH THAT THEY ALLOW BULK WATER TO REMAIN IN CONTACT WITH THE STRUCTURE AND PROMOTE DECAY. IDEALLY THEY SHOULD BE ATTACHED AND PROPERLY COVERED WITH A FUNCTIONING ROOF OR DETACHED AND FREESTANDING. SINCE THIS IS NOT NORMALLY DONE WHERE THE PORCH OR STOOP COMES IN CONTACT WITH THE STRUCTURE IS A PRIME LOCATION FOR DECAY. THE DECAY CAN BE SEEN AS WOOD ROT, EFFLORESCENCE, MOLD, ECT.

1	EXCELLENT

COVERED AND FLASHED

SIDING IS A MINIMUM 6" ABOVE FINISH GRADE.

MINIMUM OF 2% SLOPE AWAY FROM THE STRUCTURE.

MINIMUM 18" SEPARATION OF JOIST TO THE GROUND.

NO SURFACE CRACKS.

PORCH AND RAILING FREESTANDING A MINIMUM OF 2" AWAY FROM THE STRUCTURE.

NO OBSERVABLE ROT OD DECAY

ALL WOOD IN CONTACT WITH THE GROUND IS TREATED OR NATURALLY RESISTANT

ALL LOCATIONS OF CONTACT ARE INSPECTABLE FOR TERMITE TUNNELS.

2	GOOD

COVERED AND FLASHED

SIDING IS A MINIMUM 6" ABOVE FINISH GRADE.

MINIMUM OF 2% SLOPE AWAY FROM THE STRUCTURE.

MINIMUM 18" SEPARATION OF JOIST TO THE GROUND.

NO SETTLEMENT CRACKS IN SLAB ON GRADE.

PORCH AND RAILING ATTACHED TO THE STRUCTURE , FREE DRAINING AND PROPERLY FLASHED.

NO OBSERVABLE ROT OD DECAY

ALL WOOD IN CONTACT WITH THE GROUND IS TREATED OR NATURALLY RESISTANT

ALL LOCATIONS OF CONTACT ARE INSPECTABLE FOR TERMITE TUNNELS.

ALL CONTACT WITH THE STRUCTURE IS PROPERLY FLASHED.

3	ADEQUATE

RAIN EXPOSED ELEMENTS ARE SLOPED AWAY FROM THE STRUCTURE.

CRACKS UP TO 1/8" IN SLAB ON GRADE.

COVERED AND FLASHED OR OPEN AIRED.

SIDING IS A MINIMUM 6" ABOVE FINISH GRADE.

MINIMUM 18" SEPARATION OF JOIST TO THE GROUND.

NO SETTLEMENT CRACKS IN SLAB ON GRADE.

PORCH AND RAILING ATTACHED TO THE STRUCTURE IS FREE DRAINING AND PROPERLY FLASHED.

ROT OR DECAY IS NOTED ON FLOORING AND NON-STRUCTURAL ELEMENTS IN LESS THAN 1% OF THE SURFACE, SUBSTRATE SOUND.

ALL WOOD IN CONTACT WITH THE GROUND IS TREATED OR NATURALLY RESISTANT

ALL LOCATIONS OF CONTACT ARE INSPECTABLE FOR TERMITE TUNNELS.

ALL CONTACT WITH THE STRUCTURE IS PROPERLY FLASHED.

4	POOR

LEVEL TO NEGATIVELY SLOPED.

NO RAILING IF MORE THAN 7" ABOVE FINISH GRADE.

RAIN EXPOSED ELEMENTS ARE LEVEL TO 2% SLOPE TOWARD THE STRUCTURE.

CRACKS < 1/2" (INCLUDING SETTLEMENT CRACKS) IN SLAB ON GRADE.

COVERED AND FLASHED OR OPEN AIRED.

SIDING IS LESS THAN 6" ABOVE FINISH GRADE.

MINIMUM 12" SEPARATION OF JOIST TO THE GROUND.

PORCH AND RAILING ATTACHED TO THE STRUCTURE.

ROT OR DECAY IS NOTED ON FLOORING ON LESS THAN 10% OF THE SURFACE, SUBSTRATE SOUND.

ROT OR DECAY IS NOTED ON STRUCTURAL MEMBERS < 5% OF THE SURFACE, SUBSTRATE SOUND.

5	NEEDS REPAIR

CONCRETE DIRECTLY IN CONTACT WITH STRUCTURE WOOD COMPONENTS

LEVEL TO NEGATIVELY SLOPED.

NO RAILING IF MORE THAN 7" ABOVE FINISH GRADE.

RAIN EXPOSED ELEMENTS ARE LEVEL TO BACK TO THE STRUCTURE.

CRACKS ≥ 1/2" (INCLUDING SETTLEMENT CRACKS) IN SLAB ON GRADE.

COVERED OR OPEN AIRED.

SIDING IN CONTACT WITH FINISH GRADE.

PORCH AND RAILING ATTACHED TO THE STRUCTURE.

ROT OR DECAY IS NOTED ON FLOORING ON MORE THAN 10% OF NON-STRUCTURAL ELEMENTS AND 5% OF THE STRUCTURAL ELEMENTS OR SUBSTRATE NO LONGER SOUND.

DECKS					

SCOPE: DECKS ARE EXTERIOR EXTENSIONS OF THE LIVING AREA. GENERALLY CONSTRUCTED OF EITHER WOOD (PRESSURE TREATED, CEDAR, REDWOOD), OR MASONRY PATIOS (CONCRETE, FLAGSTONE, ETC). THE SURVEY FOCUS IS TO ASSESS THE STRUCTURAL INTEGRITY TO SAFELY SUPPORT THE OCCUPANTS AND DIRECT THE BULK WATER AWAY FROM THE STRUCTURE.

IMPORTANCE: IN MILD CLIMATES DECKS ARE OFTEN USED AS EXTENSIONS OF THE LIVING SPACE AND PLACED NEXT TO THE STRUCTURE. THEY ARE GENERALLY OPEN AIRED STRUCTURES THAT ARE DIRECTLY ADJACENT TO AND OR ATTACHED TO THE STRUCTURE. DECKS ARE PROBLEMATIC SINCE THEY ARE OFTEN CONSTRUCTED OF WOOD AND BUILT IN A HORIZONTAL FASHION ALLOWING RAIN TO BE EASILY DEPOSITED. RAILINGS ALSO HAVE LOCATIONS WHERE WATER CAN STAND AND PROMOTE RAPID DECAY. THE NORMAL CONSTRUCTION METHODS ALSO CREATE LOCALIZED AREAS ON FACE ATTACHED DECKING WHERE WATER CAN STAND AND CREATE ACCELERATED DECAY.

1	EXCELLENT

LEVEL TO 2% SLOPED TO THE EXTERIOR OF THE STRUCTURE.

FREE STANDING.

MINIMUM OF 2" SEPARATION FROM THE STRUCTURE.

NOT FACE FASTENED

HAND RAILING IN PLACE.

TREATED WOOD OR NATURALLY RESISTANT MATERIAL IN CONTACT WITH THE FINISH GRADE.

SIGNS OF WATER REPELLENT FINISH.

NO VISIBLE ROT OR DECAY.

ADEQUATE SUPPORTING COLUMNS

ADEQUATE JOIST, BOTH SPACING AND SIZE/SPAN.

2	GOOD
LEVEL TO 2% SLOPED TO THE EXTERIOR OF THE STRUCTURE. ATTACHED TO THE STRUCTURE WITH GOOD FLASHING. FACE FASTENED HAND RAILING IN PLACE. TREATED WOOD OR NATURALLY RESISTANT MATERIAL IN CONTACT WITH THE FINISH GRADE. SIGNS OF WATER REPELLENT FINISH. NO VISIBLE ROT OR DECAY. ADEQUATE SUPPORTING COLUMNS ADEQUATE JOIST, BOTH SPACING AND SIZE/SPAN.	
3	ADEQUATE
LEVEL TO 2% SLOPED TO THE EXTERIOR OF THE STRUCTURE. ATTACHED TO THE STRUCTURE WHIT SOME FLASHING. FACE FASTENED HAND RAILING IN PLACE. TREATED WOOD OR NATURALLY RESISTANT MATERIAL IN CONTACT WITH THE FINISH GRADE. VISIBLE ROT OR DECAY ON LESS THAN 1% OF SURFACE, SUBSTRATE SOUND. ADEQUATE SUPPORTING COLUMNS ADEQUATE JOIST, BOTH SPACING AND SIZE/SPAN	
4	POOR
LEVEL TO 2% SLOPED TOWARD THE STRUCTURE. ATTACHED TO THE STRUCTURE WITHOUT FLASHING. FACE FASTENED HAND RAILING NOT IN PLACE, INSUFFICIENT HAND RAILING. NON-TREATED WOOD OR NATURALLY RESISTANT WITHIN 6” OF THE FINISH GRADE. VISIBLE ROT OR DECAY ON LESS THAN 10% OF SURFACE, SUBSTRATE SOUND. ADEQUATE SUPPORTING COLUMNS. ADEQUATE JOIST, BOTH SPACING AND SIZE/SPAN.	

5	NEEDS REPAIR

LEVEL TO 2% SLOPED TOWARD THE STRUCTURE.

ATTACHED TO THE STRUCTURE WITHOUT FLASHING.

FACE FASTENED

HAND RAILING NOT IN PLACE, INSUFFICIENT HAND RAILING.

NON-TREATED WOOD OR NATURALLY RESISTANT WITHIN 6" OF THE FINISH GRADE.

VISIBLE ROT OR DECAY ON MORE THAN 10% OF SURFACE OR SUBSTRATE NOT SOUND.

INADEQUATE SUPPORTING COLUMNS.

INADEQUATE JOIST, BOTH SPACING AND SIZE/SPAN.

DOORS					

Scope: Doors are interested in the condition of the ingress and egress door, the sealing of these openings, and the structural integrity of the door and frame.

Importance: the doors serve as the barriers and the ingress and egress points through the exterior envelope. It is therefore their job to be structurally sound to withstand the wind loading, protect against unwelcome ingress, and seal against the elements. The sealing for the elements is protection against both air infiltration and bulk water migration. While doing these jobs it must still remain operable as points of ingress and egress.

1	EXCELLENT

DOORS AND FRAMES SHOW NO SIGN OF ROT AND OR DECAY

GASKETS ARE IN PLACE AND SEALED, INCLUDING BOTH THRESHOLD AND EDGE SEALS.

NO VISIBLE AIR GAPS ARE NOTICEABLE.

THRESHOLD IS SLOPED TO THE EXTERIOR A MINIMUM OF 2% (1/4" PER FOOT)

DOORS ARE LEVEL, PLUMB, AND CENTERED IN THE FRAME.

FRAMES ARE INTACT AND SOUND.

2	GOOD

DOORS AND FRAMES SHOW NO SIGN OF ROT AND OR DECAY

GASKETS ARE IN PLACE AND BUT NOT FULLY COMPRESSED, BOTH THRESHOLD AND EDGE SEALS.

NO VISIBLE AIR GAPS ARE NOTICEABLE.

THRESHOLD IS SLOPED TO THE EXTERIOR A MINIMUM OF 2% (1/4" PER FOOT)

DOORS ARE CENTERED IN THE FRAME.

FRAMES ARE INTACT AND SOUND.

3	ADEQUATE

FRAMES SHOWS MINIMAL ROT AND/OR DECAY AT OUTSIDE BOTTOM ONLY.

GASKETS ARE IN PLACE AND MAKING CONTACT OVER 90% OF THEIR LENGTH.

THRESHOLD IS LEVEL OR SLOPED TO THE EXTERIOR LESS THAN 2% (1/4" PER FOOT)

DOORS ARE CENTERED IN THE FRAME.

FRAMES ARE INTACT AND SOUND.

4	POOR

FRAMES SHOWS MINIMAL ROT AND/OR DECAY AT BOTTOM.

DOORS SHOW SIGNS OF ROT DECAY EXTENDING LESS THAN 1 INCH ABOVE THRESHOLD, SUBSTRATE STILL SOUND.

THRESHOLD SEAL IS IN PLACE, NO SIDE SEALS ARE IN PLACE.

THRESHOLD IS LEVEL.

DOORS ARE NOT CENTERED LEVEL AND/OR PLUMB IN THE FRAME.

FRAMES ARE INTACT AND SOUND.

5	NEEDS REPAIR

FRAMES SHOWS ROT AND/OR DECAY AT BOTTOM, SPLICES, AND/OR BUTT JOINTS, .

DOORS SHOW SIGNS OF ROT DECAY EXTENDING MORE THAN 1 INCH ABOVE THRESHOLD, SUBSTRATE STILL SOUND.

DOOR SUBSTRATE NO LONGER SOUND.

NO THRESHOLD SEAL IS IN PLACE, NO SIDE SEALS ARE IN PLACE.

THRESHOLD IS SLOPED INTO THE STRUCTURE.

DOORS ARE NOT CENTERED LEVEL AND/OR PLUMB IN THE FRAME.

FRAMES ARE NOT INTACT AND SOUND.

WINDOWS					

SCOPE: THE WINDOWS ASSESSMENT IS FOCUSED ON THE WINDOW FRAME, SILL, GLAZING, AND/OR STORM WINDOWS WHEN PRESENT. IN PARTICULAR IS THE SYSTEMS ABILITY TO KEEP WATER FROM INFULTRATING AND DIRECTING THE WATER TO THE EXTERIOR.

IMPORTANCE: WINDOWS ARE OPENINGS IN THE EXTERIOR ENVELOPE THAT ALLOW LIGHT AND VENTILATION (INTENTIONAL AND UN-INTENTIONAL) INTO THE STRUCTURE. STRUCTURALLY THEY RESIST THE LOADS DUE TO WIND AND RAIN BY TRANSFERRING THE LOADS INTO THE WALL STRUCTURE THROUGH THE FRAMES. THEY HISTORICALLY ARE SOURCES OF BULK AND ENTRAINED WATER INTO THE BUILDING ENVELOPE.

1	EXCELLENT

WINDOW FRAME

NO VISIBLE SEPARATION OF THE JOINTS AND THE FINISH IS IN TACT. IE. BUTT JOINTS, FINGER JOINTS, AND MULLIONS.

SILL

SLOPED TO THE EXTERIOR ≥ 5%

GLAZING

COMPLETE WITH NO CRACKED PANES

NO TRAPPED CONDENSATE IN MULTI-PANED WINDOWS

STORM WINDOWS

PROPERLY ATTACHED, IN PLACE, AND SEALED.

GENERAL

NO SIGNS OF DECAY OR ROT

ALL WEEP HOLES ARE UNOBSTRUCTED

2	GOOD

WINDOW FRAME

NO VISIBLE SEPARATION OF THE JOINTS. IE. BUTT JOINTS, FINGER JOINTS, AND MULLIONS.

THE FINISH MAY BE HAIRLINE CRACKED

SILL

SLOPED TO THE EXTERIOR ≥ 2%

GLAZING

NO MISSING GLAZING COMPOUND.

COMPLETE WITH NO CRACKED PANES.

NO TRAPPED CONDENSATE IN MULTI-PANED WINDOWS.

STORM WINDOWS

PROPERLY ATTACHED, IN PLACE, AND SEALED.

GENERAL

NO SIGNS OF DECAY OR ROT

ALL WEEP HOLES ARE UNOBSTRUCTED

3	ADEQUATE

WINDOW FRAME

JOINTS ARE SEPARATED ≤ 1/16". IE. BUTT JOINTS, FINGER JOINTS, AND MULLIONS.

THE FINISH MAY BE HAIRLINE CRACKED

SILL

LEVEL TO SLOPED TO THE EXTERIOR ≥ 2%

GLAZING

CRACKED AND LESS THAN 10% OF GLAZING COMPOUND MISSING.

LESS THAN 1% CRACKED PANES, ALL PANES IN PLACE.

MAY HAVE TRAPPED CONDENSATE IN MULTI-PANE WINDOWS.

STORM WINDOWS

PROPERLY ATTACHED AND IN PLACE.

GENERAL

MINIMAL ROT OR DECAY (LESS THAN 5% OF JOINTS) CONCENTRATED AT JOINTS WITH THE SUBSTRATE BEING SOUND

50% OR MORE OF WEEP HOLES ARE UNOBSTRUCTED

4	POOR

WINDOW FRAME

JOINTS ARE SEPARATED ≤ 1/8". IE. BUTT JOINTS, FINGER JOINTS, AND MULLIONS.

THE FINISH MAY BE CRACKED AND PEELING AT JOINTS

SILL

LEVEL TO SLOPED TO THE INTERIOR < 2%

GLAZING

CRACKED AND LESS THAN 20% OF GLAZING COMPOUND MISSING.

LESS THAN 5% CRACKED PANES,

LESS THAN 5% OF PANES MISSING PLACE.

MAY HAVE TRAPPED CONDENSATE IN MULTI-PANE WINDOWS.

STORM WINDOWS

POORLY ATTACHED AND/OR COMPONENTS NOT IN PLACE.

GENERAL

ROT OR DECAY ON MORE THAN 5% OF THE JOINTS WITH THE SUBSTRATE BEING SOUND

LESS THAN 50% OF WEEP HOLES ARE UNOBSTRUCTED

5	NEEDS REPAIR

JOINTS ARE SEPARATED > 1/8". IE. BUTT JOINTS, FINGER JOINTS, AND MULLIONS.

THE FINISH MAY BE CRACKED AND PEELING AT JOINTS

OBVIOUS SIGNS OF WATER INGRESS.

SILL

LEVEL TO SLOPED TO THE INTERIOR ≥ 2%.

GLAZING:

CRACKED AND LESS THAN 20% OF GLAZING COMPOUND MISSING,

MORE THAN 5% CRACKED PANES,

MORE THAN 5% OF PANES MISSING PLACE,

MAY HAVE TRAPPED CONDENSATE IN MULTI-PANE WINDOWS.

STORM WINDOWS

POORLY ATTACHED AND/OR COMPONENTS NOT IN PLACE.

GENERAL

ROT OR DECAY ON MORE THAN 10% OF THE JOINTS.

THE SUBSTRATE IS NOT SOUND

LESS THAN 75% OF WEEP HOLES ARE UNOBSTRUCTED

TRIM					
SCOPE: THE TRIM ASSESSMENT IS FOCUSED ON THE CONDITION OF THE BRICK MOULDING AROUND DOORS AND WINDOWS PLUS THE CORNER TRIM ON BUILDING EDGES AND TRANSITIONS. IN ESSENCE THE ABILITY OF THE ELEMENT TO RESIST THE ELEMENTS AND RETAIN THERE INTENDED FUNCTION.					
IMPORTANCE: TRIM IS AN ESSENTIAL PART OF THE EXTERIOR ENVELOPE. IT ALLOWS SMOOTH TRANSITION FROM THE SIDING SYSTEM TO OPENINGS AND FEATURES. THESE SMOOTH TRANSITIONS ALLOW THE APPLICATION OF SEALANT TO HELP GUARD AGAINST WATER AND AIR INFILTRATION INTO THE BUILDING ENVELOPE. DEGRADATION IS OFTEN SEEN AS EROSION OF THE DRIP EDGE, ROT/DECAY OF JOINTS (BUTTS, MITERS, FINGER, SPLICES), AND ROT/DECAY OF THE MEMBERS THEMSELVES.					
1	EXCELLENT				
ALL TRIM IS IN PLACE. ALL HORIZONTAL TRIM IS SLOPED AWAY FROM THE BUILDING ENVELOPE. ALL HORIZONTAL TRIM HAS A DISTINCT DRIP EDGE. ALL JOINTS (BUTT, MITER, FINGER, ECT) ARE CLOSED NO VISIBLE CRACKS IN THE COATING OVER JOINTS. NO VISIBLE ROT OR DECAY.					
2	GOOD				
ALL TRIM IS IN PLACE. ALL HORIZONTAL TRIM IS SLOPED AWAY FROM THE BUILDING ENVELOPE. ALL HORIZONTAL TRIM HAS A DISTINCT DRIP EDGE. ALL JOINTS (BUTT, MITER, FINGER, ECT) ARE OPEN LESS THAN 1/16". VISIBLE HAIRLINE CRACKS IN THE COATING OVER JOINTS. NO VISIBLE ROT OR DECAY.					
3	ADEQUATE				
ALL TRIM IS IN PLACE. ALL HORIZONTAL TRIM IS LEVEL. ALL JOINTS (BUTT, MITER, FINGER, ECT) ARE OPEN LESS THAN 1/8". VISIBLE CRACKS IN THE COATING OVER JOINTS. ROT OR DECAY VISIBLE ON LESS THAN 5% OF JOINTS, SUBSTRATE SOUND.					

4	POOR
LESS THAN 1% OF TRIM IS MISSING. ALL HORIZONTAL TRIM IS LEVEL TO SLOPING TOWARD THE STRUCTURE. ALL JOINTS (BUTT, MITER, FINGER, ECT) ARE OPEN LESS THAN 1/4". VISIBLE CRACKS AND/OR PEELING OF THE COATING OVER JOINTS. NO OBVIOUS BULK WATER INGRESSION. ROT OR DECAY VISIBLE ON LESS THAN 25% OF JOINTS. SUBSTRATES ARE SOUND.	
5	NEEDS REPAIR
MORE THAN 1% OF TRIM IS MISSING. ALL HORIZONTAL TRIM IS LEVEL TO SLOPING TOWARD THE STRUCTURE. ALL JOINTS (BUTT, MITER, FINGER, ECT) ARE OPEN MORE THAN 1/4". VISIBLE CRACKS AND/OR PEELING OF THE COATING OVER JOINTS. OBVIOUS BULK WATER INGRESSION. ROT OR DECAY VISIBLE ON MORE THAN 25% OF JOINTS. SUBSTRATES NOT SOUND.	
OPENING	
SCOPE: THE OPENING ASSESSMENT IS FOCUSED ON THE CONDITION AND DESIGN OF THE UTILITY ENTRANCES THROUGH THE BUILDING ENVELOPE. THE MAIN CRITERION FOR ASSESSMENT IS THE PROTECTION FROM WATER AND AIR INFILTRATION, SEPARATION FOR TERMITE INSPECTION, AND INTEGRITY OF THE ATTACHMENT(S) OF THE SERVICES.	
IMPORTANCE: UTILITIES BRING DESIRED SERVICES INTO THE STRUCTURE SUCH AS POWER, PHONE, PLUMBING, TV, ECT. THROUGH OPENINGS IN THE EXTERIOR ENVELOPE. WE WANT THESE SERVICES TO ENTER THROUGH THE OPENINGS, NOT AIR AND WATER INTRUSION AND POSSIBLE AVENUES FOR INSECT INFESTATION. PROBLEMS ASSOCIATED WITH OPENINGS ARE GENERALLY DETAILS SUCH AS POOR CAULKING OR NO DRIP LOOP.	
1	EXCELLENT
LINES COMING UP FROM FINISH GRADE ARE SPACED TO ALLOW INSPECTION FOR TERMITE TUNNELS. ENTRANCES ARE FLASHED. LINES ENTERING FROM ABOVE HAVE DRIP LOOPS. ENTRANCE HOLES ARE SEALED WITH NO VISIBLE GAPS. LINES ARE SECURELY FASTENED TO THE STRUCTURE WITHOUT GOING THROUGH THE SEALING SYSTEM.	
2	GOOD
LINES COMING UP FROM FINISH GRADE ARE SPACED TO ALLOW INSPECTION FOR TERMITE TUNNELS. LINES ENTERING FROM ABOVE HAVE DRIP LOOPS. ENTRANCE HOLES ARE SEALED WITH NO VISIBLE GAPS. LINES ARE SECURELY FASTENED TO THE STRUCTURE WITHOUT GOING THROUGH THE SEALING SYSTEM	

3	ADEQUATE
LINES COMING UP FROM FINISH GRADE ARE SPACED TO ALLOW INSPECTION FOR TERMITE TUNNELS. LINES ENTERING FROM ABOVE HAVE DRIP LOOPS. ENTRANCE HOLES ARE SEALED WITH NO VISIBLE GAPS. LINES ARE SECURELY FASTENED TO THE STRUCTURE.	
4	POOR
LINES COMING UP FROM FINISH GRADE ARE NOT SPACED TO ALLOW INSPECTION FOR TERMITE TUNNELS. LINES ENTERING FROM ABOVE DO NOT HAVE DRIP LOOPS. ENTRANCE HOLES ARE SEALED WITH NO VISIBLE GAPS. LINES ARE NOT FASTENED TO THE STRUCTURE.	
5	NEEDS REPAIR
LINES COMING UP FROM FINISH GRADE ARE NOT SPACED TO ALLOW INSPECTION FOR TERMITE TUNNELS. LINES ENTERING FROM ABOVE DO NOT HAVE DRIP LOOPS. ENTRANCE HOLES ARE NOT SEALED AND HAVE VISIBLE GAPS. LINES ARE NOT FASTENED TO THE STRUCTURE.	
SOFFITS	
SCOPE: THE SOFFIT ASSESSMENT IS FOCUSED ON THE CONDITION OF THE SOFFIT. IN PARTICULAR THE ORIENTATION OF THE SOFFIT, WHETHER THEY ARE VENTED, THEIR MATERIAL, AND OVERALL CONDITION.	
IMPORTANCE: SOFFITS ARE THE FINISH ELEMENTS FOR THE UNDERSIDE OF THE OVERHANGS. THEY HELP KEEP WIND DRIVEN BULK WATER FROM ENTERING THE BUILDING ENVELOPE ALONG THE RAFTER TAILS. THEY MAY BE INSTALLED LEVEL OR SLIGHTLY SLOPED AND ARE OFTEN MADE OF MATERIAL RANGING FROM PLYWOOD TO VINYL SHEETING. DEGRADATION IS MOST GENERALLY SEEN AROUND THE SOFFIT IN THE FORM OF WOOD DE-LAMINATION AND ROT. THE GENERAL REASONS FOR THIS OBSERVED DEGRADATION IS GENERALLY MOISTURE NOT DRAINING OUT OF THE SOFFIT, LEAKING ROOFS, AND CONDENSATION.	
1	EXCELLENT
WELL VENTED WITH LOUVERED OR SCREENED VENTS SLOPED LEVEL TO 2% AWAY FROM THE BUILDING ENVELOPE ALL AREAS ARE ENCLOSED VISIBLE DRAIN HOLES NO VISIBLE ROT/DECAY OR DELIMITATION.	
2	GOOD
WELL VENTED WITH LOUVERED OR SCREENED VENTS. SLOPED LEVEL TO 2% AWAY FROM THE BUILDING ENVELOPE. ALL AREAS ARE ENCLOSED NO VISIBLE ROT/DECAY OR DELIMITATION.	

3	ADEQUATE
VENTED WITH LOUVERED OR SCREENED VENTS. NOT VENTED. SLOPED LEVEL TOO SLIGHTLY AWAY FROM THE BUILDING ENVELOPE. ALL AREAS ARE ENCLOSED. VISIBLE ROT/DECAY OR DELIMITATION AT LESS THAN 10% OF THE JOINTS AND INTERFACES	
4	POOR
VENTED WITH LOUVERED OR SCREENED VENTS, UP TO 10% OF SCREENS MISSING NOT VENTED. SLOPED LEVEL TO SLIGHTLY TOWARD THE BUILDING ENVELOPE ALL AREAS ARE ENCLOSED. VISIBLE ROT/DECAY OR DELIMITATION AT LESS THAN 25% OF THE JOINTS AND INTERFACES SUBSTRATE STILL SOUND	
5	NEEDS REPAIR
NOT VENTED VENTED WITH LOUVERED OR SCREENED VENTS, GREATER THAN 10% OF THE SCREENS OR THE LOUVERS ARE MISSING. SLOPED TOWARD THE BUILDING ENVELOPE. ALL AREAS ARE NOT ENCLOSED VISIBLE ROT/DECAY OR DELIMITATION AT GREATER THAN 25% OF THE JOINTS AND INTERFACES. SUBSTRATES NO LONGER SOUND. VISIBLE ROT/DECAY/DELIMITATION AWAY FROM THE JOINTS/INTERFACES.	
FASCIA	
SCOPE: THE FASCIA ASSESSMENT IS FOCUSED ON THE CONDITION OF THE FASCIA. IN PARTICULAR THE ORIENTATIONS OF THE FASCIA, PRESENCE OF A DISTINCT DRIP EDGE, THEIR MATERIAL, AND OVERALL CONDITION.	
IMPORTANCE: THE FASCIA IS THE TRIM PARALLEL TO THE SIDING ALONG THE ROOF EDGE. THIS ELEMENT HELPS PREVENT THE DRIVEN RAIN AND WIND BORNE RUN OFF FROM ENTERING THE BUILDING ENVELOPE PAST THE END OF THE RAFTERS. IT ALSO HELPS PROMOTE PROPER ROOF DRAINAGE BY CREATING A DISTINCT DRIP EDGE FOR BULK WATER. DEGRADATION IS GENERALLY SEEN AS DELIMITATION, DRIP EDGE EROSION, ROT/DECAY AT BUT JOINTS, AND GENERAL OVERALL DECAY/ROT.	
1	EXCELLENT
DISTINCT DRIP EDGE. ORIENTED PLUMB TO ± 5% FROM PLUMB. FASCIAS ARE COMPLETE. NO VISIBLE ROT/DECAY OR DELIMITATION.	

2	GOOD
DISTINCT DRIP EDGE. ORIENTED PLUMB TO ± 20% FROM PLUMB. FASCIAS ARE COMPLETE. NO VISIBLE ROT/DECAY OR DELIMITATION.	
3	ADEQUATE
DISTINCT DRIP EDGE. FASCIAS ARE COMPLETE. VISIBLE ROT/DECAY OR DELIMITATION AT LESS THAN 10% OF THE JOINTS AND INTERFACES	
4	POOR
NO DISTINCT DRIP EDGE. FASCIAS ARE COMPLETE. VISIBLE ROT/DECAY OR DELIMITATION AT LESS THAN 25% OF THE JOINTS AND INTERFACES SUBSTRATE STILL SOUND.	
5	NEEDS REPAIR
NO DISTINCT DRIP EDGE. FASCIAS ARE INCOMPLETE. VISIBLE ROT/DECAY OR DELIMITATION AT GREATER THAN 25% OF THE JOINTS AND INTERFACES. SUBSTRATES NO LONGER SOUND. VISIBLE ROT/DECAY/DELIMITATION AWAY FROM THE JOINTS/INTERFACES.	
GUTTERS/DOWNSPOUTS	
SCOPE: THE GUTTER/DOWNSPOUT ASSESSMENT IS FOCUSED ON THE PRESENCE AND CONDITION OF THE GUTTER/DOWNSPOUT SYSTEM. IN PARTICULAR THE SLOPE OF THE GUTTER, WHETHER THEY ARE INSTALLED, THEIR MATERIAL, THE PRESENCE OF GROUND DISPERSION, AND OVERALL CONDITION.	
IMPORTANCE: GUTTERS ARE ELEMENTS ATTACHED TO THE EDGE OF ROOFS TO CATCH AND DIRECT THE BULK WATER FROM THE ROOF AWAY FROM THE STRUCTURE. BY PROPERLY CONTROLLING THIS RUN-OFF DAMAGE DUE TO WIND BORNE BULK WATER AND BACK-SPLASHED WATER IS REDUCED. IN CONCERT WITH GUTTERS AND DOWNSPOUTS SPLASH BLOCKS, TILES, ECT FOR GROUND DISPERCEMENT ARE IMPORTANT. DEGRADATION IS GENERALLY THROUGH CLOGGING, SAGGING, PARTS SEPARATING, IMPROPER INSTALLATION, AND CORROSION.	
1	EXCELLENT
INSTALLED WITH POSITIVE DRAIN (1/4" PER 10') TO DOWNSPOUTS. ALL COMPONENTS INSTALLED. NO VISIBLE SAGS. DOWNSPOUTS ARE IN-PLACE DOWNSPOUTS DIRECT THE WATER INTO TILES OR OTHER SUBSURFACE DRAINAGE STRUCTURE. DOWNSPOUTS EXTEND A MINIMUM OF 10' AWAY FROM THE STRUCTURE. GUTTERS APPEAR CLEAN AND FREE FROM DEBRIS. GUTTERS AND DOWNSPOUTS ARE ATTACHED SOUNDLY.	

2	GOOD

INSTALLED WITH POSITIVE DRAIN (1/4" PER 10') TO DOWNSPOUTS.

ALL COMPONENTS INSTALLED.

NO VISIBLE SAGS.

DOWNSPOUTS ARE IN-PLACE

DOWNSPOUTS EXTEND A MINIMUM OF 5' AWAY FROM THE STRUCTURE.

SPLASH BLOCKS ARE USED TO DIRECT WATER AWAY FROM THE STRUCTURE A MINIMUM OF 5'

GUTTERS APPEAR CLEAN AND FREE FROM DEBRIS.

GUTTERS AND DOWNSPOUTS ARE ATTACHED SOUNDLY.

3	ADEQUATE

INSTALLED LEVEL TO POSITIVE DRAIN (0 TO 1/4" PER 10') TO DOWNSPOUTS.

ALL COMPONENTS INSTALLED.

NO LOCATIONS FOR STANDING WATER.

DOWNSPOUTS ARE IN-PLACE

DOWNSPOUTS EXTEND A MINIMUM OF 3' AWAY FROM THE STRUCTURE.

SPLASH BLOCKS ARE USED TO DIRECT WATER AWAY FROM THE STRUCTURE A MINIMUM OF 3'

GUTTERS AND DOWNSPOUTS ARE ATTACHED SOUNDLY.

4	POOR

INSTALLED LEVEL TO POSITIVE DRAIN (0 TO 1/4" PER 10') TO DOWNSPOUTS.

MORE THAN 90 % OF COMPONENTS INSTALLED.

SAGS WHERE STANDING WATER MAY COLLECT, BUT NO SIGNS OF OVERFLOW ARE PRESENT.

DOWNSPOUTS ARE IN PLACE

DOWNSPOUTS EXTEND A MINIMUM OF 3' AWAY FROM THE STRUCTURE.

SPLASH BLOCKS ARE USED TO DIRECT WATER AWAY FROM THE STRUCTURE A MINIMUM OF 3'

GUTTERS ARE ATTACHED SOUNDLY DOWNSPOUTS MAY BE LOOSE.

5	NEEDS REPAIR

LESS THAN 90 % OF COMPONENTS INSTALLED.

SAGS WHERE STANDING WATER MAY COLLECT, SIGNS OF OVERFLOW ARE PRESENT.

DOWNSPOUTS ARE NOT IN PLACE

DOWNSPOUTS EXTEND LESS THAN 3' AWAY FROM THE STRUCTURE.

NO SPLASH BLOCKS.

GUTTERS AND/OR DOWNSPOUTS MAY BE LOOSE.

FLASHING					

SCOPE: THE FLASHING ASSESSMENT IS FOCUSED ON THE PRESENCE AND CONDITION OF FLASHINGS. IN PARTICULAR THE PRESENCE OF FLASHING ABOVE DOORS AND WINDOWS, IN ROOF VALLEYS, AND TRANSITIONS WHERE REQUIRED. THE FREE DRAINING OF THE FLASHING IS PARAMOUNT.

IMPORTANCE: FLASHING IS A REQUIRED AND INTEGRAL COMPONENT TO ALL SIDING AND ROOFING SYSTEMS. WHEN PROPERLY INSTALLED FLASHING ALLOWS ANY BULK WATER THAT GETS BEHIND THE PRIMARY SEALING SYSTEMS BE DIRECTED OUT AWAY FROM THE BUILDING ENVELOPE AND DRAINED. FLASHING SHOULD BE IN PLACE ABOVE ANY HORIZONTAL CHANGE IN THE WALL SURFACE, SUCH AS WINDOWS AND DOORS, WHERE ROOFS BLEND INTO WALLS, SUCH AS PORCHES, ROOF VALLEYS, AND PROTRUSIONS TROUGH THE ROOF. MOST LEAKAGE IS DUE TO OMISSIONS OF FLASHING, FLASHING SLOPED BACK TO INSTEAD OF AWAY FROM THE STRUCTURE, AND POORLY TREATED FLASHING EDGES.	
1	EXCELLENT
SLOPED ≥ 5% AWAY FROM THE STRUCTURE. IN PLACE OVER ALL DOORS AND WINDOWS DISTINCT DRIP EDGES SPACED A MINIMUM OF ¼ " FROM HORIZONTAL ELEMENTS	
2	GOOD
SLOPED ≥ 2% AWAY FROM THE STRUCTURE. IN PLACE OVER ALL DOORS AND WINDOWS DISTINCT DRIP EDGES SPACED A MINIMUM OF 1/8 " FROM HORIZONTAL ELEMENTS	
3	ADEQUATE
LEVEL TO POSITIVELY SLOPED (0 TO 2% AWAY FROM THE STRUCTURE) IN PLACE OVER ALL DOORS AND WINDOWS CAPILLARY BREAK BETWEEN ALL HORIZONTAL ELEMENTS	
4	POOR
LEVEL TO POSITIVELY SLOPED (0 TO 2% AWAY FROM THE STRUCTURE) NO SIGNS OF STANDING WATER. IN PLACE OVER AT LEAST 90% OF ALL DOORS AND WINDOWS CAPILLARY BREAK BETWEEN ALL HORIZONTAL ELEMENTS	
5	NEEDS REPAIR
LEVEL TO NEGATIVELY SLOPED (≥ 0% SLOPE TOWARD THE STRUCTURE.). MISSING ON MORE THAN 10 % OF DOORS AND WINDOWS NO CAPILLARY BREAKS BETWEEN HORIZONTAL ELEMENTS	

ROOF					
SCOPE: THE ROOF ASSESSMENT IS FOCUSED ON THE CONDITION OF THE ROOF MATERIAL, THE VALLEYS/RIDGES, AND THE ROOF EDGES. IN PARTICULAR, THE FOCUS IS ON CONDITION OF SHINGLES, VALLEYS, RIDGE CAPS, AND ROOF EDGES FROM A GROUND VISUAL SURVEY.					
IMPORTANCE: THE ROOF IS THE PRIMARY SYSTEM FOR CONTROLLING AND REMOVING BULK WATER FROM ENTERING THE STRUCTURE. ITS STYLE HELPS TO DIRECT AND SHED THE WATER. FAILURE GENERALLY INITIATES IN VALLEYS, PROTRUSIONS THROUGH THE ROOF (IE, VENTS, PIPES, FLUES ECT), AND THE EDGES OF THE ROOF (APPROXIMATELY LAST 2' TO 3').					

1	EXCELLENT

SHINGLES

COMPLETE COVERAGE, NO MISSING SHINGLES

NO NOTICEABLE SHINGLE DEGRADATION

VALLEYS

ALL VALLEYS ARE FLASHED OR HAVE PROPER SHINGLE TREATMENT (CALIFORNIA WEAVE, UNDERLAY AND TRIM, ETC.)

MINIMUM 2" SEPARATION BETWEEN THE ROOFING AND THE SIDING – PROPERLY FLASHED.

ALL MASONRY IS PROPERLY STEP FLASHED.

RIDGE CAPS

RIDGE CAPS ARE IN PLACE

RIDGES ARE STRAIGHT, NO VISIBLE SAGS.

ROOF EDGES

ALL ROOF EDGES ARE STRAIGHT AND TRUE.

DRIP EDGE IS INSTALLED.

DRIP EDGE IS SPACED A MINIMUM OF ¼ " FROM THE ROOF DECKING

2	GOOD

SHINGLES

COMPLETE COVERAGE, NO MISSING SHINGLES

SHINGLE DEGRADATION IS LIMITED TO FADING AND MINOR AGGREGATE LOSS (NO BARE ASPHALT VISIBLE)

VALLEYS

ALL VALLEYS ARE FLASHED OR HAVE PROPER SHINGLE TREATMENT (CALIFORNIA WEAVE, UNDERLAY AND TRIM, ETC.)

MINIMUM 2" SEPARATION BETWEEN THE ROOFING AND THE SIDING – PROPERLY FLASHED.

ALL MASONRY IS PROPERLY STEP FLASHED.

RIDGE CAPS

RIDGE CAPS ARE COMPLETE AND IN PLACE.

RIDGES ARE STRAIGHT, NO VISIBLE SAGS.

ROOF EDGES

ALL ROOF EDGES ARE STRAIGHT AND TRUE.

DRIP EDGE IS INSTALLED.

DRIP EDGE IS SPACED A MINIMUM OF 1/8 " FROM THE ROOF DECKING

3	ADEQUATE

SHINGLES

COMPLETE COVERAGE, NO MISSING SHINGLES.

SHINGLE DEGRADATION IS LIMITED TO FADING AND MINOR AGGREGATE LOSS (NO BARE ASPHALT VISIBLE).

MINOR CURL AT EDGE OF TABS NOTED.

VALLEYS

ALL VALLEYS ARE FLASHED OR HAVE PROPER SHINGLE TREATMENT (CALIFORNIA WEAVE, UNDERLAY AND TRIM, ETC.)

MINIMUM 2" SEPARATION BETWEEN THE ROOFING AND THE SIDING – PROPERLY FLASHED.

ALL MASONRY IS PROPERLY STEP FLASHED.

RIDGE CAPS

RIDGE CAPS ARE COMPLETE AND IN PLACE.

RIDGES ARE STRAIGHT.

VISIBLE SAGS ARE LIMITED TO AREA BETWEEN ROOF JOISTS..

ROOF EDGES

ALL ROOF EDGES ARE STRAIGHT.

DRIP EDGE PRESENT.

4	POOR

SHINGLES

LESS THAN ONE % OF SHINGLES ARE MISSING.

SIGNIFICANT AGGREGATE LOSS (BARE ASPHALT SUBSTRATE VISIBLE).

SHINGLE CURLING AT EDGE OF TABS NOTED.

VALLEYS

VALLEY FLASHING IS TO NARROW

IMPROPER VALLEY SHINGLE TREATMENT (CALIFORNIA WEAVE, UNDERLAY AND TRIM, ETC.).

LESS THAN 2" SEPARATION BETWEEN THE ROOFING AND THE SIDING OR NO FLASHING AT WALL INTERFACE.

MASONRY IS SURFACE FLASHED.

RIDGE CAPS

RIDGE CAPS MINIMAL MISSING SHINGLES (< 1%) CONCENTRATED OVER GABLES/OVERHANGS.

RIDGES MAY BE BOWED (OR SAGGING) LESS THAN 1" PER 10'.

ROOF EDGES

ALL ROOF EDGES MAY BE OUT OF LINEARITY NO MORE THAN 1" PER 10'.

NO DRIP EDGE IS INSTALLED.

5	NEEDS REPAIR

CAULKING					
FASCIA/SOFFIT					
SIDING/SOFFIT					
SIDING/TRIM					
SIDING/WINDOWS					
SIDING/DOORS					
SIDING/OPENINGS					
PAINT					
FASCIA					
SOFFIT					
SIDING					
TRIM					
WINDOWS					
DOORS					

APPENDIX E
SUMMARY OF SITE SURVEY DATA

Orientation 1970s	North	North-West	North-East	South	South-West	South-East	West	East	Uncertain	Total			
	19	9	4	23	1	3	19	15	12	105			
Type 1970s	Detached	Attached	Blank	Uncertain	Total								
	65	23	1	16	105								
Style 1970s	Colonial	Ranch	Townhouse	Other	Uncertain	Total							
	16	38	23	12	16	105							
Stories 1970s	1	1.5	2	2.5	3	Uncertain	Total						
	19	6	62	0	0	18	105						
Garage 1970s	TRUE	FALSE	Uncertain	Total									
	40	60	5	105									
Garage Type 1970s	Attached	Detached	Blank	Uncertain	Total								
	36	7	61	1	105								
Foundation Type 1970s	Basement	Crawlspace	Slab-on-grade	Uncertain	Total								
	51	7	31	16	105								
Ponding 1970s	True	False	Uncertain	Total									
	15	68	22	105									
Surface Depressions 1970s	True	False	Uncertain	Total									
	17	68	20	105									
Ten Feet 1970s	True	False	Uncertain	Total									
	78	6	21	105									
Large Trees 1970s	True	False	Uncertain	Total									
	26	55	24	105									
Shrubs 1970s	True	False	Uncertain	Total									
	62	13	30	105									
Flower Beds 1970s	True	False	Uncertain	Total									
	52	12	41	105									
Wood Mulch 1970s	True	False	Uncertain	Total									
	50	31	24	105									
Patio Slab 1970s	True	False	Uncertain	Total									
	34	48	23	105									
Slab Type 1970s	Attached	Detached	No answer	Uncertain	Total								
	47	5	50	3	105								
Patio Permeability 1970s	Impervious	Pervious	No answer	Uncertain	Total								
	49	3	49	4	105								
Patio Slope 1970s	<2%	>+2%+	Blank	Uncertain	Total								
	12	29	52	12	105								
Patio Material 1970s	Brick	Block	Concrete	Other	No answer	Uncertain	Total						
	5	1	41	0	49	9	105						
Patio Condition 1970s	Good	Adequate	Poor	Blank	Uncertain	Total							
	10	24	8	49	14	105							
Patio Condition 1970s	Good	Adequate	Poor	Blank	Uncertain	Total							
	10	24	8	49	14	105							
Retaining Wall 1970s	True	False	Uncertain	Total									
	6	96	3	105									
Retaining Wall Height 1970s	16"	20"	2'	3'	6'	8'	10'	Blank	Uncertain	Total			
	0	1	3	0	1	0	1	96	3	105			

Retaining Wall Material 1970s	Brick	Block	Concrete	Other	Blank	Uncertain	Total						
	3	1	1	4	96	0	105						
Drive parking 1970s	True	False	Uncertain	Total									
	95	2	8	105									
Off-Street Parking 1970s	True	False	Uncertain	Total									
	76	5	24	105									
Drive Permeability 1970s	Impervious	Pervious	Blank	Uncertain	Total								
	91	5	2	7	105								
Drive Length 1970s	<10'	>=10'	Blank	Uncertain	Total								
	65	15	2	23	105								
Sidewalks 1970s	True	False	Uncertain	Total									
	94	4	7	105									
Sidewalk Permeability 1970s	Impervious	Pervious	Blank	Uncertain	Total								
	89	4	4	8	105								
Sidewalk Slope 1970s	<2%	>+2%	Blank	Uncertain	Total								
	16	58	5	26	105								
Wind Rating 1970S	A	B	C	Uncertain	Total								
	0	99	3	3	105								
Wind Shield 1970s	Excellent	Normal	Poor	Uncertain	Total								
	7	86	0	12	105								
Wind Shield 1970s	Excellent	Normal	Poor	Uncertain	Total								
	7	86	0	12	105								
Foundation Material 1970s	Block	Concrete	Brick	Uncertain	Total								
	43	39	2	21	105								
Visible Cracks 1970s	Cracks	No Cracks	Uncertain	Total									
	29	56	20	105									
Window Wells 1970s	True	False	Uncertain	Total									
	7	88	10	105									
Covered Wells 1970s	True	False	Uncertain	Total									
	1	103	2	106									
Walk Outs 1970s	True	False	Uncertain	Total									
	20	69	16	105									
Stairwell 1970s	True	False	Uncertain	Total									
	16	82	7	105									
Siding 1970s	Vinyl	Aluminum	Brick	Wood	Asbestos-Cement	Other	Uncertain	Total					
	28	20	19	12	6	1	19	105					
Above Grade Finish 1970s	<6"	>=6"	Uncertain	Total									
	24	35	46	105									
Roof Types 1970s	Gable	Hip	Gambrel	Other	Uncertain	Total							
	81	2	7	7	8	105							
Roof Slope 1970s	<3" in 12"	3" to 6" in 12"	>6" in 12"	Uncertain	Total								
	4	78	1	22	105								
Roofing Material 1970s	Asphalt	Wood	Uncertain	Total									
	99	1	5	105									
Number of Valleys 1970s	0	1	2	3	4	5	6	7	8	14	Blank	Uncertain	Total
	67	5	10	2	3	0	0	0	1	0	2	15	105
Valley Condition 1970s	Good	Adequate	Poor	Uncertain	Blank	Total							
	11	14	2	10	68	105							

Number of Roof Openings 1970s	0	1	2	3	4	5	6	7	8	9	Blank	Uncertain	Total
	3	13	25	10	13	6	3	1	1	1	7	22	105
Roof Opening Condition 1970s	Good	Adequate	Poor	Blank	Uncertain	Total							
	19	46	1	11	28	105							
Number of Skylights 1970s	0	1	2	3	4	Blank	Uncertain	Total					
	85	3	3	3	0	10	1	105					
Gable Vents 1970s	True	False	Uncertain	Total									
	64	31	10	105									
Ridge Vents 1970s	True	False	Uncertain	Total									
	31	60	14	105									
Soffit Vents 1970s	True	False	Uncertain	Total									
	46	30	29	105									
Plumbing Vents 1970s	True	False	Uncertain	Total									
	42	29	34	105									
Vent Fans 1970s	True	False	Uncertain	Total									
	7	87	11	105									
Turbine Vents 1970s	True	False	Uncertain	Total									
	2	100	3	105									
Passive Vents 1970s	True	False	Uncertain	Total									
	2	84	19	105									
Roof Drip Edges 1970s	True	False	Uncertain	Totals									
	14	76	15	105									
Drip Edge Spacing 1970s	<2"	>=2"	Blank	uncert	Total								
	8	17	77	3	105								
Soffits 1970s	Wood	Metal	Vinyl	Other	Blank	Uncertain	Total						
	38	43	12	0	2	10	105						
Soffit Orientation 1970s	Horizontal	Angled	Uncertain	Total									
	94	4	7	105									
Soffit Slope 1970s	Slight	20 degrees	25 degrees (Rev)	6" in 12"	3"-6" in 12"	Uncertain	Blank	Total					
	1	1	0	2	2	3	96	105					
Overhang 1970s	0"	0"-6"	6"-12"	12"-18"	18"-24"	>24"	Uncertain	Total					
	1	6	14	13	11	8	52	105					
Overhang Same 1970s	True	False	un	Total									
	38	26	41	105									
Gutters & Downspouts 1970s	True	False	Uncertain	Total									
	91	3	11	105									
Gutter & Downspout Maint. 1970s	True	False	Uncertain	Total									
	7	69	29	105									
Gutter & Downspout Mat. 1970s	Aluminum	Steel	Blank	Uncertain	Total								
	71	11	1	22	105								
Splash Run-Off 1970s	True	False	Uncertain	Total									
	61	13	31	105									
Water Flow 1970s	True	False	Uncertain	Total									
	36	22	47	105									
Window Frame 1970s	Vinyl	Metal	Wood	Uncertain	Total								
	25	30	36	14	105								
Window Glazing 1970s	Single	Double	Uncertain	Total									
	32	60	13	105									

Window Condition 1970s	Good	Adequate	Poor	Uncertain	Total								
	39	35	6	25	105								
Storm Windows 1970s	Metal	Vinyl	Not Present	Uncertain	Total								
	30	1	62	12	105								
SW Cond 1970s	Good	Adequate	Poor	Blank	Uncertain	Total							
	11	16	3	61	14	105							
Door Material 1970s	Wood	Metal	Vinyl	Other	Uncertain	Total							
	67	22	0	0	16	105							
Door Condition 1970s	Good	Adequate	Poor	Blank	Uncertain	Total							
	34	25	4	1	41	105							
Storm Door 1970s	Metal	Wood	Vinyl	Blank	Not Present	Uncertain	Total						
	55	2	6	0	23	20	106						
Storm Door Condition 1970s	Good	Adequate	Poor	Blank	Uncertain	Total							
	31	23	1	22	28	105							
Deck 1970s	True	False	Uncertain	Total									
	41	55	9	105									
Deck Material 1970s	Treated Wood	Redwood	Cedar	Other	Can't Tell	Blank	Uncertain	Total					
	42	2	0	1	2	55	3	105					
Deck Construction 1970s	Surface Nailed	Surface Screwed	Blank	Uncertain	Total								
	44	1	59	1	105								
Deck Condition 1970s	Good	Adequate	Poor	Blank	Uncertain	Total							
	10	18	4	64	9	105							
Fencing 1970s	True	False	Uncertain	Total									
	63	31	11	105									
Fencing Condition 1970s	Good	Adequate	Poor	Blank	Uncertain	Total							
	15	28	7	31	24	105							
Porch/Stoop 1970s	Concrete	Covered	Wood Frame	Other	Blank	Uncertain	Total						
	85	3	3	3	5	6	105						
Porch/Stoop Condition 1970s	Good	Adequate	Poor	Blank	Uncertain	Total							
	18	47	2	11	27	105							
Ext. Stair Construction 1970s	Wood Frame	Concrete	Other	Blank	Uncertain	Total							
	15	35	3	45	7	105							
Ext. Stair Condition 1970s	Good	Adequate	Poor	Blank	Uncertain	Total							
	12	30	4	47	12	105							
Chimney Storm Cap 1970s	True	False	Uncertain	Total									
	43	49	13	105									
Chimney Condition 1970s	Good	Adequate	Poor	Blank	Uncertain	Total							
	26	25	2	38	14	105							
Fascia Construction 1970s	Metal	Wood	Vinyl	Blank	Uncertain	Total							
	35	48	5	1	16	105							
Fascia Condition 1970s	Good	Adequate	Poor	Blank	Uncertain	Total							
	27	35	7	9	27	105							
Rot 1970s	Noted	Not Noted	Uncertain	Total									
	28	61	16	105									
Insect Damage 1970s	True	False	Uncertain	Total									
	3	101	2	106									

Orientation 1990s	North	North-West	North-East	South	South-West	South-East	West	East	Uncertain	Total			
	20	5	8	16	9	8	10	14	13	103			
Type 1990s	Detached	Attached	Blank	Uncertain	Total								
	50	39	3	11	103								
Style 1990s	Colonial	Ranch	Townhouse	Other	Uncertain	Total							
	38	11	37	5	12	103							
Stories 1990s	1	1.5	2	2.5	3	Uncertain	Total						
	6	0	72	4	7	14	103						
Garage 1990s	TRUE	FALSE	Uncertain	Total									
	40	55	8	103									
Garage Type 1990s	Attached	Detached	Blank	Uncertain	Total								
	44	2	56	1	103								
Foundation Type 1990s	Basement	Crawlspace	Slab-on-grade	Uncertain	Total								
	69	9	11	14	103								
Ponding 1990s	True	False	Uncertain	Total									
	11	74	18	103									
Surface Depressions 1990s	True	False	Uncertain	Total									
	10	79	14	103									
Ten Feet 1990s	True	False	Uncertain	Total									
	77	4	22	103									
Large Trees 1990s	True	False	Uncertain	Total									
	7	83	13	103									
Shrubs 1990s	True	False	Uncertain	Total									
	35	32	36	103									
Flower Beds 1990s	True	False	Uncertain	Total									
	63	7	33	103									
Wood Mulch 1990s	True	False	Uncertain	Total									
	64	12	27	103									
Patio Slab 1990s	True	False	Uncertain	Total									
	20	62	21	103									
Slab Type 1990s	Attached	Detached	No answer	Uncertain	Total								
	28	6	62	7	103								
Patio Permeability 1990s	Impervious	Pervious	No answer	Uncertain	Total								
	34	3	63	3	103								
Patio Slope 1990s	<2%	>+2%+	Blank	Uncertain	Total								
	4	25	63	11	103								
Patio Material 1990s	Brick	Block	Concrete	Other	No answer	Uncertain	Total						
	5	1	26	3	64	4	103						
Patio Condition 1990s	Good	Adequate	Poor	Blank	Uncertain	Total							
	25	9	1	64	4	103							
Patio Condition 1990s	Good	Adequate	Poor	Blank	Uncertain	Total							
	25	9	1	64	4	103							
Retaining Wall 1990s	True	False	Uncertain	TOTAL									
	6	91	6	103									
Retaining Wall Height 1990s	16"	20"	2'	3'	6'	8'	10'	Blank	Uncertain	Total			
	1	0	2	3	0	1	0	93	3	103			
Retaining Wall Material 1990s	Brcik	Block	Concrete	Other	Blank	Uncertain	Total						
	0	4	0	4	93	2	103						
Drive parking 1990s	True	False	Uncertain	Total									
	98	0	5	103									

Off-Street Parking 1990s	True	False	Uncertain	Total									
	86	1	16	103									
Drive Permeability 1990s	Impervious	Pervious	Blank	Uncertain	Total								
	90	5	2	6	103								
Drive Length 1990s	<10'	>=10'	Blank	Uncertain	Total								
	57	32	1	13	103								
Sidewalks 1990s	True	False	Uncertain	Total									
	94	5	4	103									
Sidewalk Permeability 1990s	Impervious	Pervious	Blank	Uncertain	Total								
	91	3	5	4	103								
Sidewalk Slope 1990s	<2%	>+2%	Blank	Uncertain	Total								
	11	65	6	21	103								
Wind Rating 1990S	A	B	C	Uncertain	Total								
	1	87	5	10	103								
Wind Shield 1990s	Excellent	Normal	Poor	Uncertain	Total								
	2	83	2	16	103								
Wind Shield 1990s	Excellent	Normal	Poor	Uncertain	Total								
	2	83	2	16	103								
Foundation Material 1990s	Block	Concrete	Brick	Uncertain	Total								
	22	63	1	17	103								
Visible Cracks 1990s	Cracks	No Cracks	Uncertain	Total									
	18	75	10	103									
Window Wells 1990s	True	False	Uncertain	Total									
	7	90	6	103									
Covered Wells 1990s	True	False	Uncertain	Total									
	2	99	2	103									
Walk Outs 1990s	True	False	Uncertain	Total									
	15	57	31	103									
Stairwell 1990s	True	False	Uncertain	Total									
	18	77	8	103									
Siding 1990s	Vinyl	Aluminum	Brick	Wood	Asbestos-Cement	Other	Uncertain	TOTAL					
	55	15	9	8	0	0	16	103					
Above Grade Finish 1990s	<6"	>=6"	Uncertain	Total									
	12	62	29	103									
Roof Types 1990s	Gable	Hip	Gambrel	Other	Uncertain	Total							
	100	0	1	0	2	103							
Roof Slope 1990s	<3" in 12"	3" to 6" in 12"	>6" in 12"	Uncertain	Total								
	1	72	9	21	103								
Roofing Material 1990s	Asphalt	Wood	Uncertain	Total									
	98	0	5	103									
Number of Valleys 1990s	0	1	2	3	4	5	6	7	8	14			
	37	3	20	1	8	3	4	2	0	1			
Valley Condition 1990s	Good	Adequate	Poor	Uncertain	Blank	Total							
	45	6	0	11	41	103							
Number of Roof Openings 1990s	0	1	2	3	4	5	6	7	8	9	Blank	Uncertain	Total
	3	25	16	8	11	6	5	1	0	0	8	20	103
Roof Opening Condition 1990s	Good	Adequate	Poor	Blank	Uncertain	Total							
	57	10	0	13	23	103							
Number of Skylights 1990s	0	1	2	3	4	Blank	Uncertain	Total					
	71	11	6	2	3	8	2	103					

Gable Vents 1990s	True	False	Uncertain	Total									
	28	63	12	103									
Ridge Vents 1990s	True	False	Uncertain	Total									
	64	22	17	103									
Soffit Vents 1990s	True	False	Uncertain	Total									
	58	12	33	103									
Plumbing Vents 1990s	True	False	Uncertain	Total									
	37	39	22	98									
Vent Fans 1990s	True	False	Uncertain	Total									
	1	100	2	103									
Turbine Vents 1990s	True	False	Uncertain	Total									
	0	100	3	103									
Passive Vents 1990s	True	False	Uncertain	Total									
	11	83	9	103									
Roof Drip Edges 1990s	True	False	Uncertain	Totals									
	13	77	13	103									
Drip Edge Spacing 1990s	<2"	>=2"	Blank	Uncertain	Total								
	16	5	79	3	103								
Soffits 1990s	Wood	Metal	Vinyl	Other	Blank	Uncertain	Total						
	20	44	18	1	0	20	103						
Soffit Orientation 1990s	Horizontal	Angled	Uncertain	Total									
	101	0	2	103									
Soffit Slope 1990s	Slight	20 degrees	25 degrees (Rev)	6" in 12"	3"-6" in 12"	Uncertain	Blank	Total					
	0	0	1	2	0	0	100	103					
Overhang 1990s	0"	0"-6"	6"-12"	12"-18"	18"-24"	>24"	Uncertain	Total					
	1	8	36	9	1	0	48	103					
Overhang Same 1990s	True	False	un	Total									
	39	15	49	103									
Gutters & Downspouts 1990s	True	False	Uncertain	Total									
	93	1	9	103									
Gutter & Downspout Maint. 1990s	True	False	Uncertain	Total									
	3	75	25	103									
Gutter & Downspout Mat. 1990s	Aluminum	Steel	Blank	Uncertain	Total								
	76	17	0	10	103								
Splash Run-Off 1990s	True	False	Uncertain	Total									
	79	2	22	103									
Water Flow 1990s	True	False	Uncertain	Total									
	48	12	43	103									
Window Frame 1990s	Vinyl	Metal	Wood	Uncertain	Total								
	58	19	12	14	103								
Window Glazing 1990s	Single	Double	Uncertain	Total									
	2	99	2	103									
Window Condition 1990s	Good	Adequate	Poor	Uncertain	Total								
	71	9	0	23	103								
Storm Windows 1990s	Metal	Vinyl	Not Present	Uncertain	Total								
	2	2	85	14	103								
SW Cond 1990s	Good	Adequate	Poor	Blank	Uncertain	Total							
	15	4	0	81	3	103							
Door Material 1990s	Wood	Metal	Vinyl	Other	Uncertain	Total							
	24	61	5	2	11	103							
Door Condition 1990s	Good	Adequate	Poor	Blank	Uncertain	Total							
	73	9	0	0	21	103							

Storm Door 1990s	Metal	Wood	Vinyl	Blank	Not Present	Uncertain	Total						
	28	0	7	1	52	15	103						
Storm Door Condition 1990s	Good	Adequate	Poor	Blank	Uncertain	Total							
	40	5	1	48	9	103							
Deck 1990s	True	False	Uncertain	Total									
	65	31	7	103									
Deck Material 1990s	Treated Wood	Redwood	Cedar	Other	Can't Tell	Blank	Uncertain	Total					
	55	1	1	0	0	31	15	103					
Deck Construction 1990s	Surface Nailed	Surface Screwed	Blank	Uncertain	Total								
	54	5	40	4	103								
Deck Condition 1990s	Good	Adequate	Poor	Blank	Uncertain	Total							
	29	12	2	48	12	103							
Fencing 1990s	True	False	Uncertain	Total	0	0							
	40	51	12	103	0								
Fencing Condition 1990s	Good	Adequate	Poor	Blank	Uncertain	Total							
	22	15	2	52	12	103							
Porch/Stoop 1990s	Concrete	Covered	Wood Frame	Other	Blank	Uncertain	Total						
	78	0	12	2	2	9	103						
Porch/Stoop Condition 1990s	Good	Adequate	Poor	Blank	Uncertain	Total							
	15	54	3	8	23	103							
Ext. Stair Construction 1990s	Wood Frame	Concrete	Other	Blank	Uncertain	Total							
	15	61	4	15	8	103							
Ext. Stair Condition 1990s	Good	Adequate	Poor	Blank	Uncertain	Total							
	52	13	4	15	19	103							
Chimney Storm Cap 1990s	True	False	Uncertain	Total									
	49	37	17	103									
Chimney Condition 1990s	Good	Adequate	Poor	Blank	Uncertain	Total							
	52	5	0	36	10	103							
Fascia Construction 1990s	Metal	Wood	Vinyl	Blank	Uncertain	Total							
	38	34	9	2	20	103							
Fascia Condition 1990s	Good	Adequate	Poor	Blank	Uncertain	Total							
	43	11	5	15	29	103							
Rot 1990s	Noted	Not Noted	Uncertain	Total									
	20	69	14	103									
Insect Damage 1990s	True	False	Uncertain	Total									
	1	101	1	103									

BUILDING COMPONENT CONDITION VISUAL SURVEY RESULTS											
AVERAGE SCORES											
	1970s	1990s	Total		1970s	1990s	Total		1970s	1990s	Total
GRADING _ FRONT	2.71	2.39	2.55	TRIM _ FRONT	2.99	2.83	2.91	SIDING/WIND _ FRONT	3.36	3.08	3.22
RIGHT	2.11	2.10	2.11	RIGHT	2.91	2.49	2.71	RIGHT	3.36	2.96	3.19
REAR	2.28	2.27	2.27	REAR	2.99	2.63	2.79	REAR	3.33	3.02	3.18
LEFT	2.05	2.11	2.08	LEFT	2.83	2.57	2.70	LEFT	3.18	3.50	3.33
AVERAGE	2.29	2.22	2.25	AVERAGE	2.93	2.63	2.78	AVERAGE	3.31	3.14	3.23
LANDSCAPING _ FRONT	2.92	2.71	2.81	OPENINGS _ FRONT	2.86	2.55	2.69	SIDING/DOOR _ FRONT	3.28	3.13	3.21
RIGHT	2.73	2.52	2.63	RIGHT	2.85	2.67	2.76	RIGHT	3.25	3.04	3.17
REAR	2.79	2.34	2.54	REAR	3.07	2.71	2.87	REAR	3.24	2.93	3.08
LEFT	2.73	2.53	2.63	LEFT	2.87	2.57	2.70	LEFT	3.16	3.11	3.13
AVERAGE	2.79	2.52	2.66	AVERAGE	2.91	2.62	2.76	AVERAGE	3.23	3.05	3.15
SIDEWALK _ FRONT	3.03	2.07	2.56	SOFFITS _ FRONT	2.66	2.28	2.47	SIDING/OPEN _ FRONT	3.30	2.99	3.13
RIGHT	2.62	2.39	2.55	RIGHT	2.67	2.28	2.48	LEFT	3.27	2.86	3.07
REAR	2.65	2.29	2.52	REAR	2.75	2.31	2.51	REAR	3.48	3.22	3.34
LEFT	2.91	2.35	2.70	LEFT	2.75	2.24	2.48	RIGHT	3.81	3.46	3.65
AVERAGE	2.80	2.27	2.58	AVERAGE	2.71	2.28	2.48	AVERAGE	3.47	3.13	3.30
FOUNDATION _ FRONT	2.52	2.08	2.29	FASCIA _ FRONT	2.93	2.63	2.78	FASCIA _ PAINT_FRONT	3.08	2.71	2.91
RIGHT	2.67	2.22	2.46	RIGHT	2.92	2.48	2.70	LEFT	3.07	2.55	2.83
REAR	2.59	2.14	2.35	REAR	2.94	2.49	2.70	REAR	3.09	2.53	2.82
LEFT	2.67	2.13	2.39	LEFT	2.89	2.40	2.64	RIGHT	3.10	2.52	2.86
AVERAGE	2.61	2.14	2.37	AVERAGE	2.92	2.50	2.70	AVERAGE	3.09	2.57	2.85
PORCH _ FRONT	2.80	2.25	2.52	GUTTERS _ FRONT	2.98	2.50	2.74	SOFFIT _ PAINT_FRONT	2.91	2.34	2.67
RIGHT	2.86	3.00	2.91	RIGHT	2.73	2.32	2.49	LEFT	2.95	2.30	2.69
REAR	2.93	2.60	2.79	REAR	3.02	2.41	2.69	REAR	2.97	2.25	2.64
LEFT	2.86	2.25	2.64	LEFT	2.65	2.37	2.48	RIGHT	2.91	2.29	2.68
AVERAGE	2.86	2.52	2.71	AVERAGE	2.84	2.40	2.60	AVERAGE	2.94	2.30	2.67
DECK _ FRONT	2.71	3.19	2.95	FLASHING _ FRONT	3.24	3.26	3.25	SIDING _ PAINT_FRONT	2.92	2.39	2.72
RIGHT	3.33	3.00	3.22	RIGHT	2.94	3.18	3.06	LEFT	2.91	2.32	2.67
REAR	3.03	2.62	2.78	REAR	3.14	3.19	3.17	REAR	3.06	2.38	2.78
LEFT	2.89	2.50	2.67	LEFT	2.94	3.10	3.02	RIGHT	2.91	2.33	2.71
AVERAGE	2.99	2.83	2.90	AVERAGE	3.07	3.18	3.13	AVERAGE	2.95	2.35	2.72
SIDING _ FRONT	2.63	2.18	2.40	ROOF _ FRONT	2.66	2.22	2.44	TRIM _ PAINT_FRONT	3.20	2.95	3.08
RIGHT	2.69	2.42	2.56	RIGHT	2.67	2.18	2.40	LEFT	3.09	2.58	2.85
REAR	2.71	2.30	2.49	REAR	2.78	2.21	2.48	REAR	3.14	2.84	2.98
LEFT	2.78	2.42	2.59	LEFT	2.75	2.16	2.41	RIGHT	3.12	2.68	2.93
AVERAGE	2.70	2.33	2.51	AVERAGE	2.72	2.19	2.43	AVERAGE	3.14	2.76	2.96
DOOR _ FRONT	2.57	2.13	2.36	FASCIA/SOFFIT _ FRONT	3.32	2.96	3.16	WIND _ PAINT_FRONT	2.99	2.40	2.77
RIGHT	2.93	2.14	2.57	RIGHT	3.35	2.91	3.19	LEFT	2.98	2.32	2.70
REAR	2.83	2.28	2.52	REAR	3.32	2.92	3.14	REAR	3.06	2.42	2.80
LEFT	2.64	2.30	2.45	LEFT	3.28	2.80	3.10	RIGHT	2.98	2.43	2.77
AVERAGE	2.74	2.21	2.47	AVERAGE	3.32	2.90	3.15	AVERAGE	3.00	2.39	2.76
WINDOWS _ FRONT	2.74	2.21	2.48	SIDING/SOFFIT _ FRONT	3.16	2.83	3.02	DOOR _ PAINT_FRONT	2.76	2.35	2.56
RIGHT	2.80	2.24	2.53	RIGHT	3.18	2.96	3.10	LEFT	2.89	2.46	2.71
REAR	2.81	2.15	2.46	REAR	3.31	2.90	3.13	REAR	2.92	2.43	2.69
LEFT	2.75	2.19	2.47	LEFT	3.24	2.80	3.08	RIGHT	3.00	2.18	2.69
AVERAGE	2.77	2.20	2.48	AVERAGE	3.22	2.87	3.08	AVERAGE	2.89	2.36	2.66
				SIDING/TRIM _ FRONT	3.49	3.23	3.38				
				RIGHT	3.47	3.03	3.29				
				REAR	3.51	3.03	3.29				
				LEFT	3.49	2.88	3.25				
				AVERAGE	3.49	3.05	3.30				

BUILDING COMPONENT CONDITION VISUAL SURVEY RESULTS											
COEFFICIENTS OF VARIATION											
	1970s	1990s	Total		1970s	1990s	Total		1970s	1990s	Total
GRADING _ FRONT	0.27	0.35	0.31	TRIM _ FRONT	0.24	0.32	0.28	SIDING/WIND _ FRONT	0.29	0.29	0.29
RIGHT	0.60	0.53	0.57	RIGHT	0.24	0.30	0.28	RIGHT	0.24	0.32	0.28
REAR	0.63	0.51	0.57	REAR	0.23	0.28	0.27	REAR	0.24	0.27	0.26
LEFT	0.63	0.54	0.59	LEFT	0.20	0.27	0.24	LEFT	0.22	1.28	0.91
AVERAGE	0.53	0.48	0.51	AVERAGE	0.23	0.29	0.27	AVERAGE	0.25	0.54	0.44
LANDSCAPING _ FRONT	0.23	0.23	0.23	OPENINGS _ FRONT	0.27	0.26	0.27	SIDING/DOOR _ FRONT	0.30	0.31	0.30
RIGHT	0.23	0.25	0.24	RIGHT	0.25	0.34	0.29	RIGHT	0.22	0.43	0.31
REAR	0.27	0.25	0.28	REAR	0.25	0.27	0.26	REAR	0.22	0.31	0.27
LEFT	0.26	0.24	0.25	LEFT	0.22	0.28	0.26	LEFT	0.22	0.41	0.32
AVERAGE	0.25	0.24	0.25	AVERAGE	0.25	0.29	0.27	AVERAGE	0.24	0.36	0.30
SIDEWALK _ FRONT	0.72	0.30	0.66	SOFFITS _ FRONT	0.26	0.25	0.27	SIDING/OPEN _ FRONT	0.24	0.31	0.28
RIGHT	0.26	0.29	0.27	RIGHT	0.29	0.25	0.29	LEFT	1.18	1.48	1.31
REAR	0.26	0.25	0.26	REAR	0.27	0.25	0.28	REAR	0.22	0.59	0.45
LEFT	0.23	0.45	0.32	LEFT	0.25	0.19	0.25	RIGHT	0.21	0.27	0.24
AVERAGE	0.37	0.32	0.38	AVERAGE	0.27	0.24	0.27	AVERAGE	0.46	0.66	0.57
FOUNDATION _ FRONT	0.29	0.26	0.29	FASCIA _ FRONT	0.25	0.61	0.45	FASCIA _ PAINT_FRONT	0.30	0.36	0.33
RIGHT	0.25	0.29	0.28	RIGHT	0.27	0.31	0.30	LEFT	0.30	0.33	0.33
REAR	0.29	0.34	0.33	REAR	0.23	0.27	0.27	REAR	0.26	0.33	0.30
LEFT	0.21	0.33	0.29	LEFT	0.23	0.28	0.27	RIGHT	0.23	0.38	0.30
AVERAGE	0.26	0.30	0.30	AVERAGE	0.25	0.37	0.32	AVERAGE	0.27	0.35	0.32
PORCH _ FRONT	0.26	0.27	0.29	GUTTERS _ FRONT	0.29	0.27	0.30	SOFFIT _ PAINT_FRONT	0.30	0.31	0.32
RIGHT	0.13	0.27	0.19	RIGHT	0.28	0.22	0.26	LEFT	0.25	0.33	0.30
REAR	0.23	0.36	0.29	REAR	0.31	0.28	0.32	REAR	0.27	0.35	0.33
LEFT	0.13	0.43	0.26	LEFT	0.31	0.24	0.28	RIGHT	0.19	0.33	0.27
AVERAGE	0.19	0.33	0.26	AVERAGE	0.30	0.25	0.29	AVERAGE	0.25	0.33	0.31
DECK _ FRONT	0.35	0.32	0.33	FLASHING _ FRONT	0.61	0.34	0.49	SIDING _ PAINT_FRONT	0.25	0.33	0.29
RIGHT	0.33	0.35	0.33	RIGHT	0.32	0.34	0.33	LEFT	0.19	0.33	0.26
REAR	0.20	0.27	0.25	REAR	0.29	0.31	0.30	REAR	0.21	0.37	0.29
LEFT	0.16	0.30	0.25	LEFT	0.28	0.32	0.30	RIGHT	0.19	0.33	0.27
AVERAGE	0.26	0.31	0.29	AVERAGE	0.38	0.33	0.36	AVERAGE	0.21	0.34	0.28
SIDING _ FRONT	0.30	0.31	0.32	ROOF _ FRONT	0.29	0.26	0.29	TRIM _ PAINT_FRONT	0.25	0.35	0.30
RIGHT	0.26	0.29	0.28	RIGHT	0.29	0.24	0.29	LEFT	0.23	0.34	0.29
REAR	0.24	0.28	0.27	REAR	0.27	0.24	0.28	REAR	0.19	0.31	0.26
LEFT	0.28	0.26	0.28	LEFT	0.27	0.25	0.29	RIGHT	0.20	0.33	0.27
AVERAGE	0.27	0.29	0.29	AVERAGE	0.28	0.25	0.29	AVERAGE	0.22	0.33	0.28
DOOR _ FRONT	0.29	0.31	0.31	FASCIA/SOFFIT _ FRONT	0.27	0.26	0.27	WIND _ PAINT_FRONT	0.28	0.27	0.30
RIGHT	0.36	0.21	0.35	RIGHT	0.24	0.25	0.25	LEFT	0.24	0.36	0.30
REAR	0.26	0.25	0.28	REAR	0.21	0.26	0.24	REAR	0.24	0.31	0.29
LEFT	0.32	0.29	0.31	LEFT	0.24	0.22	0.25	RIGHT	0.21	0.28	0.26
AVERAGE	0.31	0.27	0.31	AVERAGE	0.24	0.25	0.25	AVERAGE	0.24	0.31	0.29
WINDOWS _ FRONT	0.29	0.24	0.29	SIDING/SOFFIT _ FRONT	0.25	0.31	0.27	DOOR _ PAINT_FRONT	0.28	0.40	0.35
RIGHT	0.28	0.26	0.30	RIGHT	0.22	0.29	0.25	LEFT	0.25	0.27	0.30
REAR	0.25	0.20	0.27	REAR	0.19	0.24	0.22	REAR	0.21	0.29	0.26
LEFT	0.26	0.19	0.26	LEFT	0.23	0.24	0.24	RIGHT	0.16	0.39	0.26
AVERAGE	0.27	0.22	0.28	AVERAGE	0.22	0.27	0.25	AVERAGE	0.23	0.34	0.29
				SIDING/TRIM _ FRONT	0.28	0.29	0.29				
				RIGHT	0.25	0.29	0.27				
				REAR	0.20	0.26	0.24				
				LEFT	0.25	0.23	0.26				
				AVERAGE	0.25	0.27	0.26				

APPENDIX F
STATISTICAL INFORMATION

The statistical analysis entailed the use of Contingency Tables to organize the data and Chi-square tests to assess relationships between housing characteristics and component conditions. Typically the Null Hypothesis (H_o) is that there is no difference between two set of houses, classified according to the presence or absence of some characteristic, in terms of the proportion of the houses with some selected condition. In other words, membership in either housing-characteristic group is independent of the subject condition.

To illustrate, the frequency of visible foundation cracks was examined in relation to the type of foundation material. The Null Hypothesis was that houses with block foundation do not differ from those with concrete foundation in terms of the proportion of foundations with visible cracks. The alternative hypothesis (H_1) is that the occurrence of foundation cracks is not independent of foundation material.

An example of a contingency table is presented below. The resulting chi-square, corrected for continuity, is 46.4. Based on a significance level of .05 and 1 degree of freedom, we find that we must reject the H_0 in favor of H_1. The material seems to play a role in the occurrence of visible foundations cracks. In fact if we look at the tabulation, we see that 65 percent of block foundations and only 10 percent of concrete foundation were found to have visible cracks.

TABLE F1
2X2 CONTINGENCY TABLE
VISIBLE CRACKS IN FOUNDATIONS VS. FOUNDATION MATERIAL

	BLOCK	CONCRETE	TOTAL HOUSES
Has visible cracks	35	9	44
Has no visible cracks	19	83	102
Total Houses	54	92	146

However an examination of the data indicated that 2/3 of the houses with block foundations were built in the 1970s. A further examination of the data and Chi-square testing indicates that that the 1970's houses have a higher proportion of cracks. These findings raised a question - Is time or the type of foundation material the real factor? Since most foundations of houses built in the 1970s have block foundations, does it only appear that block foundations tend to have more cracks? A separate analysis of the foundation material and visible foundation cracks was performed for each age group. The results are tabulated in the following two tables.

TABLE F2
2X2 CONTINGENCY TABLE
VISIBLE CRACKS IN FOUNDATIONS VS. FOUNDATION MATERIAL
1970s

	BLOCK	CONCRETE	TOTAL HOUSES
Has visible cracks	21	6	27
Has no visible cracks	14	27	41
Total Houses	35	33	68

TABLE F3
2X2 CONTINGENCY TABLE
VISIBLE CRACKS IN FOUNDATIONS VS. FOUNDATION MATERIAL
1990s

	BLOCK	CONCRETE	TOTAL HOUSES
Has visible cracks	14	3	17
Has no visible cracks	5	56	61
Total Houses	19	59	78

Chi-squares of 10.7 and 35.8 for the 1970s and 1990s data, respectively, meant that the null hypothesis was rejected in each case. Thus the presence of cracks is not independent of the foundation material in either period. These finding would seem to indicate that, while time is a factor in the occurrence of foundation cracks, block foundations have a higher proportion of cracks.

A similar analysis relating the presence of surface depressions to the occurrence of foundation cracks produced similar results. A chi-square of 29.0 meant that the null hypothesis must be rejected in favor of the H_1 that surface depressions play a role in the occurrence of foundation cracks.

TABLE F4
2X2 CONTINGENCY TABLE
VISIBLE CRACKS IN FOUNDATIONS VS. SURFACE DEPRESSIONS

	HAS DEPS.	NO DEPS.	TOTAL HOUSES
Has visible cracks	19	24	43
Has no visible cracks	7	104	111
Total Houses	26	128	154

Statistical analysis attempted to examine the relationship of such factors as the age of the house or the size of the overhang to the occurrence of rot. Analysis of the data did not yield any meaningful insights into conditions associated with the occurrence of rot.

Remodeling of the houses may have played a role by either eliminating or concealing rot. Casual observations by the inspectors indicated that many of the houses built during the 1970s might have been re-sided. At times trim, including soffit and fascia, had been covered with aluminum or vinyl sheathing or replaced. A similar situation was noted with the windows.

Analysis of the numerical scoring data from the building component condition visual survey failed to yield meaningful results. Inspectors were required to provide a numerical rating for 28 separate component categories for each of the four sides of every house. Each house was inspected and graded by up to three inspectors. The average of the scores across inspectors was computed for each component category in every house.

In order to use the contingency table/chi-square analysis, each component score was classified as either "good" or "bad" based on the magnitude of the score. This binary classification allowed the use of 2x2 contingency tables. Unfortunately, the subsequent analysis failed to isolate any differences between orientation of the house and trouble with siding, paint, or front-door caulk.

The convention is this section is that a score of "2" means "good" and, a "3" means "adequate". The averaged scores tended not to exhibit much variation - they tend to be in the good end of the range. The average score for each of the component for the 1970s sample, the 1990s sample and the total sample fell in either the 2 or 3 range. The apparent reluctance to give "excellent" or "poor" grades made it difficult to separate out conditions that can be associated with housing deterioration.

Due to these problems with the scoring data, no further analysis of the data was undertaken.

APPENDIX G
ALTERNATIVE CONDITION ASSESSMENT FORM

ADDRESS:

GRADING

Slope		Depressions	
5%+, 10'		None	
5%+,4'		No/10'	
0 to 2%		1 ft2 per 10'	
level		1 to 5 ft2 per 10'	
negative		5 ft2 per 10'	
NA		NA	

LANDSCAPE

Vents		Large Trees		Moist Plants		6" foliage from siding	
1' away		10' away		10'		6" min., all	
6" away				6'		6" min.,90%	
covered		Mulch		4'		6" min. 75%	
NA		6"away		2'		6" min.,25%	
				very, w/2'		NA	
				NA			

FOUNDATION

Cracks		Re-entrant cracks		Tie holes		Rot		Mortar	
none		2x wall thickness		all patched		at entry		good	
less than 1/32		4x		50%		wood		cracks	
less than1/4		5x		0%				20% gone	
less than 1/2		Bulges		Plumb		Effloures		CMU	
no contact w/grade		None		perfect		no		spalling	
ground level		< 1/4"		<1/2 in 4"		<1"above grade		<10%	
NA		> 1/4"		>1/2 in4"		>5" above grade		>10%	
		NA		NA		<2"above found.		loose	
						NA		>5%	
								NA	

SIDING

Plumb		Rot		Bulges		General		Missing siding	
prefect		none		none		> 6" above grade		< 1%	
out1/8"in 4'		<5% butts		less 1/2"		< 6" above grade		> 1%	
out1/4"in 4'		<5% interfaces		less1"		less than 6"		NA	
out1/2"in 4'		<15% end+interfac		less 11/2"		weeps clogged			
NA		>15% end+interfac		water entry		rust stained			
		substrate not sound		NA		nail hole decay			
		NA				2" sep.from roof			

DOORS

Rot		Threshold				Seals	
none		slope, ext., 2%		centered		sealed	
frame bottom only		>2%		good substr.		90%	
bottom, outside		level		NA		no sides	
bottom, splices, joints		negative				no seals	
door, 1" above thres.		NA				NA	
door >1" above thres.							
NA							

WINDOWS

Frame		Sill		Storms		Glazing		Rot	
intact		5% SLOPED		attach, seals		complete		none	
finish cracks		2%		poor attach		cracked <1%		>5%	
<1/16" joint separat.		<2%		NA		5%crack glass		<5%	
<1/8		>2%				10% putty gone		<10%	
>1/8		NA				20% putty gone		bad substrate	
peeling paint						5% glass gone		NA	
weeps free						NA			
rot									
NA									

SOFFITT

Rot		Slope		**FASCIA**		Rot	
joints - >10%		level to 2%		Drip edge		no	
<25%		level to 2%		complete		<10%	
>25%		negative		plumb 5%		<25%	
substrate bad		NA		plumb 20%		25%	
non joint rot				NA		NA	
NA							

GUTTERS

Pitch		Extentions		Components		General	
1/4" in 10'		10' away		all		sags	
0 to 1/4"		5'		<90%		d-spouts installed	
level		3'		>90%		overflows	
NA		<3'		loose		NA	
		NA		NA			

ROOF

Shingles		Valleys		Ridge		Edges	
complete		flashing too narrow		sags, joists		out of line,1"per 10'	
fading,minor agg. loss		improper shingles		miss shingles		NA	
curling at tabs		masonry stepflash		bow 1" per 10'			
bare asphalt		NA		NA			
1% shingles missing							
NA							

PORCHES

Rot	Railing	Cracks(SOG)	Slope	Siding
none	freestand,2"away from H	none	2% away from H.	6"above grade
non-structual, <1%	attached to H.,flash,drain	up to 1/8"	level to 2%	<6"above grade
non-structual, <10%	attached to house	< 1/2"	level to negative	in contact w/grade
non-structual, >10%	no railing	>1/2"	NA	NA
Structural rot, <5%	NA	NA		
Structural rot, >5%				
elements not sound				
NA				

Cover	General
cover and flashed	18",,joist to ground
cover,flashed,or open air	12", joist to ground
covered or open aired	treat.wood,soil contact
NA	termite inspectable
	concrete contact wood

DECKS

Rot	Attachment	Railing	General	Slope
none	Freestanding	in place	face fastened	level to 2% away
<1%	attached w/good flashing	not in place	not face fastened	level to 2% toward
<10%	attached w/some flashing	insufficient	treat.wood in contact	NA
>10%	attached w/o flashing	none	non treated,6"above gr.	
	NA		inadequate columns	
			inadequate joists	
			NA	

TRIM

Joint Coating	Rot	Joints	General	Slope
no cracks	none	open<1/16"	all trim in place	sloped away
hairline cracks	<5% of joints	open<1/8"	<1% missing	level
visible cracks	<25% of joints	open<1/4"	>1% missing	sloped toward
peeling coating	>25% of joints	open>1/4"	horiz.trim has drip edge	NA
NA	substrate not sound	NA	no bulk water entry	
	NA		obvious bulk water entry	
			NA	

FLASHING

Slope	Drip Edge	In Place
>5% away from house	spaced 1/4" from hor.elem	over all Drs.+ windows
>2% away from house	spaced 1/8" from hor.elem	over 90% Drs.+ windows
0 to 2% away	capil.break from hor.elem.	missing more than 10%
0 to 2%, no water stand	no capil.break from H.E.	NA
> 0% away	NA	
NA		

OPENINGS

General	Termites	Drip Loops	Entrance Holes
lines fastened w/o going thru sealing system	lines spaced for inspect.	yes	sealed
lines fastened to house	not spaced	no	not sealed
lines not fastened to H.	NA	NA	NA
NA			

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