

Expanded Facilities and Technical Specifications

Silverlight Studios - Complete Technical Database

SOUND STAGES - DETAILED SPECIFICATIONS

Stage 1 - "The Founder"

Historical Significance: Original stage built in 1947

Size: 12,000 square feet

Height: 35 feet clear

Floor Load Capacity: 250 lbs per square foot

Power: 1,200 amps, 3-phase

Infrastructure Details:

- Wall Construction: 18-inch thick concrete block with acoustic dampening panels

- Acoustic Rating: NC-20 (nearly silent ambient noise)

- Doors: Four 20-foot x 20-foot elephant doors for large set piece entry

- HVAC: Dedicated 80-ton climate control system maintaining 72°F ±2° with 45% humidity

- Sprinkler System: Wet pipe system with heat-activated heads, NFPA compliant

- Electrical Grid: 40 dedicated circuits with dimmer capability

- Rigging Points: 180 certified rigging points rated for 1,000 lbs each

Technical Capabilities:

- Silent air conditioning (can operate during filming)
- Blackout capability (100% light control)
- Full green screen coverage option
- Integrated cable management through floor trenches
- Wireless internet boosted signal (1 Gbps fiber backbone)

Permanent Installations:

- Two 20' x 30' green screen cyc walls
- Permanent LED grid (can replace traditional overhead lights)
- Built-in intercom system connecting to production offices
- Dedicated video village monitoring stations

Recent Renovations:

- 2023: LED grid installation (\$450,000)
- 2022: Floor resurfacing and leveling
- 2021: HVAC system upgrade to ultra-quiet model

Notable Productions:

- "Whispers in the Dark" (2024) - Psychological thriller
- "Family Matters" (2023-2024) - Sitcom interior sets
- "The Lawyer's Office" (2022-2023) - Legal drama standing set

Booking Rate: \$8,000 per day (includes basic lighting package and power)

Stage 3 - "The Colossus"

Size: 42,000 square feet (our largest stage)

Height: 75 feet clear (allows for multi-story sets)

Floor Load Capacity: 500 lbs per square foot (reinforced)

Power: 4,000 amps, 3-phase

Infrastructure Details:

- Wall Construction: Triple-layer construction for superior sound isolation

- Acoustic Rating: NC-15 (quieter than a whisper)

- **Doors: Six elephant doors, two 30' x 35' for large vehicle access**
- **HVAC: Dual-zone 200-ton system with adjustable output**
- **Floor: Reinforced concrete with embedded shock absorption**
- **Ceiling: Structural steel grid capable of supporting 60,000 lbs total load**

Advanced Technical Capabilities:

- **LED Volume Wall: 120' x 40' curved LED wall (2.3mm pixel pitch)**

- Real-time rendering engine integrated
 - Unreal Engine 5 compatible
 - Camera tracking integration for parallax accuracy
 - Can display 8K content at 60fps
 - Individual panel replacement possible (modular design)
 - Motion Control: Built-in bolt plates for Technodolly/robotic camera systems
 - Repeatable camera moves with millimeter precision
 - Integration with pre-visualization software
- Can store and recall 100+ different move programs

Water Capability:

- 25,000-gallon capacity water tank (built into floor)
- Adjustable depth from 2 inches to 8 feet
- Temperature control (60°F to 95°F)
- Wave generation system
- Rain curtain system overhead
- Complete drainage in under 2 hours

Water recycling and filtration system

Rigging Systems:

- Computerized winch system - 40 individual winches
- Grid lighting system - 300 motorized light positions
- Safety-rated for flying performers up to 60 feet
- Automated fire curtain system

Specialized Equipment Included:

- 100-ton crane with 80-foot reach (track-mounted)
- 4K camera package available
- Full lighting package (over 500 fixtures)
- Smoke/fog effects system

- Wind generation (up to 60 mph)

Environmental Controls:

- Can simulate weather conditions
- Programmable lighting (daylight to night cycles)
- Temperature extremes (tested 40°F to 110°F)
- Humidity control (10% to 80%)

Recent Major Productions:

- "Stellar Empire" (2024) - Spaceship interior/LED volume production
- "Ocean's Call" (2023) - Underwater scenes in water tank
- "Tornado Alley" (2023) - Weather disaster film
- "Mech Warriors" (2022) - Giant robot battle sequences

Technical Support Staff Included:

- Stage manager
- Gaffer
- Key grip
- LED wall technician
- IT support (for LED wall content)

Booking Rate: \$45,000 per day (includes LED wall operation, basic lighting, standard power)

Stage 7 - "The Transformer"

Size: 18,000 square feet

Height: 50 feet clear

Floor Load Capacity: 350 lbs per square foot

Unique Feature: Complete modularity

Modular Wall System:

- All four walls can be reconfigured
- Magnetic attachment points on 4-foot grid
- Wall sections include:
 - Green screen panels (30 available)
 - Blue screen panels (15 available)
 - Black drape panels (40 available)
 - White cyc panels (20 available)
 - LED panel walls (12 available)

- Acoustic absorption panels (25 available)
- Reconfiguration time: 4 hours with 4-person crew

Technical Specifications:

- *Motion Capture System:*

- 240 cameras providing full coverage
- Volume capture area: 50' x 50' x 20' high
- Facial performance capture capable
- Real-time visualization with digital characters
- Can capture up to 8 performers simultaneously
- Marker-based and markerless tracking
- Sub-millimeter accuracy
- 120fps capture rate
- Integration with Maya, MotionBuilder, Unreal Engine
- Green Screen Excellence:
 - Three-wall green screen setup (paint and fabric options)
 - Professional-grade chroma key paint (Rosco DigiComp)
 - Fabric screens can be rolled in/out in 30 minutes
 - Perfectly even lighting system

Floor green screen available (seamless integration)

Camera Tracking:

- Multiple systems available:
 - Optical tracking (6 DOF - six degrees of freedom)
 - Mechanical encoders (for cranes and jibs)
 - Sensor fusion (combines multiple tracking methods)
 - Real-time data streaming to compositing systems
 - Frame-accurate synchronization
 - Works with all major camera systems

Lighting System:

- 200 LED Fresnel fixtures on motorized grid
- Full DMX control
- Preset lighting schemes:
 - Even green screen lighting
 - Natural daylight simulation
 - Studio interview lighting
 - High-key comedy lighting
 - Low-key drama lighting
 - Custom programmable setups

- Color temperature adjustable (2700K to 6500K)
- Full RGB color mixing capability
- Wireless control via tablet interface

Special Features:

- Raised platform system (creates multi-level sets quickly)
- Turntable platform (20-foot diameter, 2 RPM max, 5,000 lb capacity)
- Integrated wind effects (16 individually controllable fans)
- Automated blackout curtain system
- Portable fog/haze system with even distribution

Recent Productions:

- "Superhero Academy" - Flying sequences and superpowers
- "Time Jumpers" - Time travel effects and parallel worlds
- "Virtual" - Video game world sequences
- "Capture" - Motion capture for animated feature

Included Services:

- Motion capture technician
- Data processing and cleanup
- Real-time preview setup
- Technical director for virtual production

Booking Rate: \$15,000 per day (includes motion capture system, tracking, standard lighting)

Stage 12 - "The Fortress"

Size: 25,000 square feet

Height: 45 feet clear

Floor Load Capacity: 500 lbs per square foot (reinforced concrete)

Specialty: Heavy-duty action and practical effects

Structural Features:

- Reinforced Floor: Designed for heavy vehicles and equipment

- Can support multiple cars, trucks, or armored vehicles
- Tested to support a 30,000 lb vehicle
- Floor has embedded anchor points every 6 feet (rated 10,000 lbs each)
- Explosion-Safe Design:

- Walls and ceiling rated for controlled explosions
 - Blast-resistant windows in observation areas
 - Fire suppression system with multiple zones
 - Automated safety sensors
- Emergency ventilation system (complete air exchange in 3 minutes)

Crane Systems:

- Two overhead cranes (10-ton capacity each)
- Rail-mounted for positioning anywhere in stage
- Remote operation from safety distance
- Safety-certified weekly

Pyrotechnic Capabilities:

- Licensed for Class A and B explosives
- Dedicated pyrotechnic storage (climate-controlled, secure)
- Multiple blast shields available
- Professional pyrotechnician required (included with stage rental for effects work)
- Safety inspection before each explosive effect
- Fire watch mandatory during and after pyrotechnics

Special Effects Systems:

- *Wind Effects:*

- 20 industrial fans (up to 80 mph wind)
- Directional control
- Variable speed programming
- Rain System:
- Overhead pipe grid covers entire stage
- 500 spray nozzles
- Water pressure control (mist to downpour)
- 10,000-gallon storage tank with heating capability

Recycling system

Snow System:

- Overhead snow machines (biodegradable snow material)
- Multiple particle sizes available
- Adjustable fall rate

Optional ground cover (synthetic snow)

Fog/Atmosphere:

- 12 high-output fog machines
- Even distribution system
- Clear-out fans for quick reset
- Multiple fog types (light haze to thick fog)

Stunt Rigging:

- Professional-grade truss system
- Wire flying rigs (4 independent systems)
- Descender rigs for controlled falls
- Stunt pads and crash mats (extensive collection)
- Air ram systems for explosion throws
- Ratchet systems for pull-back effects

Vehicle Features:

- Drive-in access (30' x 30' doors)
- Car mounts and process trailers available
- Tire-killer strips for controlled skids
- Paint-removal floor treatment (rubber marks clean easily)
- Vehicle rigging points
- Automotive lighting package

Safety Features:

- Fire marshal on-site during pyrotechnic work
- Medical personnel required for stunts
- Comprehensive insurance coverage
- Safety meeting room adjacent to stage
- First aid station fully equipped
- Emergency exits clearly marked and tested weekly

Recent Productions:

- "Maximum Impact" (2024) - Action thriller with extensive stunts
- "War Zone" (2023) - Military action sequences
- "Street Racers" (2023) - Car chases and crashes
- "Demolition Day" (2022) - Extensive pyrotechnic effects

Included Personnel:

- Stage manager
- Safety supervisor
- Pyrotechnician (when needed)
- Special effects technicians (2)

Booking Rate: \$22,000 per day (includes safety personnel, basic effects equipment, vehicle access)

BACKLOT ENVIRONMENTS

New York City Street - "The Five Boroughs"

Total Area: 6 acres

Street Length: 1,200 linear feet

Building Count: 42 facades + 12 fully functional interiors

Detailed Layout:

Block 1 - Financial District (1880s-1920s architecture)

- Bank building with working vault (practical)
- Stock exchange exterior
- Law offices (3 stories functional)
- Period street lamps (gas-light style, LED powered)
- Cobblestone streets (removable panels for modern street underneath)

Block 2 - Mid-Town Modern (1940s-1960s architecture)

- Art deco storefronts
- Classic diner (full interior, functional kitchen)
- Hotel entrance with revolving door
- Subway entrance (leads to underground set)
- Fire escapes on all buildings

Block 3 - Contemporary (1990s-present)

- Modern office building glass facades
- Coffee shop (functional interior)
- Residential brownstone with stoop
- Urban park pocket (trees, benches, fountain)

Block 4 - Industrial/Warehouse District

- Brick warehouse facades
- Loading docks
- Alley access (multiple interconnected)
- Fire exit stairs
- Chain-link fencing

Technical Infrastructure:

- Utilities: All buildings have working electricity, water, gas connections

- Lighting: Over 300 practical street lamps and building lights

- Traffic Control: Working traffic lights at 4 intersections (programmable)

- Surveillance: 40 hidden camera positions throughout

- Weather Protection: Retractable awnings cover key areas

Underground Systems:

- Subway platform set (200 feet long)
- Sewer system set (practical running water)
- Basement sets connected to multiple buildings
- Underground parking garage

Dressing Options:

- Modern vehicle traffic
- Period cars (1920s through present)
- Seasonal decorations (Christmas, Halloween, etc.)
- Event dressing (street fairs, protests, celebrations)
- Weather effects (rain, snow, wind integrated)

Moveable Elements:

- Newspaper boxes
- Trash cans
- Bus stop shelters
- Hot dog carts
- Phone booths (multiple eras)
- Park benches
- Fire hydrants
- Street signs (customizable)

Special Features:

- One building facade on hydraulics (can collapse safely for disaster scenes)
- Breakaway windows throughout (safety glass)
- Practical steam grates (ground-level fog effect)
- Multiple power hookups for additional lighting/effects
- Green screen capabilities (removable green panels can replace sky)

Recent Productions:

- "Metro City Defenders" (TV Series) - 60% of outdoor scenes
- "Big City Dreams" (2024) - Multiple locations throughout
- "Urban Tales" (TV Series) - Standing set

- "Street Life" (2023) - Detective series

Daily Rate: \$12,000 (dressed for modern), \$18,000 (period conversion)

Western Town - "Silverlight Gulch"

Era: 1860s-1890s Old West

Total Area: 4 acres

Building Count: 28 structures (18 complete, 10 facades)

Complete Town Layout:

Main Street:

- Golden Nugget Saloon:

- 3,000 sq ft interior
- Working bar (40 feet long, authentic wood)
- Second floor balcony (interior and exterior access)
- Piano (period-accurate, playable)
- Swinging doors (replaceable, stunt-safe)
- Chandelier (12-candle, LED powered)
- Card tables, roulette wheel, period furnishings

• General Store:

- 1,500 sq ft interior
- Period inventory (over 1,000 prop items)
- Working cash register (period prop)
- Wood-burning stove (functional, vented)

Storage room and basement access

Sheriff's Office & Jail:

- Office: 800 sq ft with working cells
- Three jail cells with real iron bars
- Wanted posters (customizable)
- Period weapons display (props)

Desk, filing systems, period details

Bank:

- 1,200 sq ft interior
- Working vault door (6,000 lbs, functional)
- Teller windows (period-accurate)
- Safety deposit area

Manager's office

Blacksmith Shop:

- 600 sq ft interior
- Functional forge (propane, realistic)
- Anvil, period tools

Horseshoes and ironwork props

Undertaker/Funeral Parlor:

- Creepy atmosphere
- Coffin displays

Period embalming room (set dressing only)

Hotel - "The Silverlight Inn":

- Three-story facade
- Ground floor functional (lobby, dining room)
- Second floor (four guest rooms, functional)
- Third floor facade only

Period furnishings throughout

Church:

- 1,000 sq ft interior
- Functional bell tower
- Pews seating 80
- Pulpit, organ (prop), altar
- Stained glass windows (theatrical plastic)

Side Streets & Back Alleys:

- Doctor's office
- Stables and livery (can house 6 horses safely)
- Water tower (50 feet tall, landmark)
- Telegraph office
- Boarding house
- Barber shop
- Dress shop
- Newspaper office

Special Features:

- *Dirt Streets: Specially formulated dust (doesn't blow away easily, cameras through it)*

- *Boardwalks: 800 feet of wooden sidewalks*

- *Hitching Posts: Throughout town (functional)*

- ***Water Trough: Practical running water***

- ***Gallows: Removable structure (stunt-safe)***

- ***Cemetery: 40 tombstones (customizable names)***

Technical Infrastructure:

- ***Hidden Modern Elements:***

- Electrical service to every building
- WiFi coverage throughout
- Water and sewer connections
- Fire suppression systems (hidden)

Tunnels: Underground crew passage system (allows movement without appearing on camera)

Weather Effects:

- Dust/wind generators
- Rain system
- Lightning effects (practical)
- Smoke/haze for atmosphere

Livestock Handling:

- Professional wranglers required
- Animal holding areas off-camera
- Water and feed stations
- Veterinary access
- Insurance for animal work

Period Vehicles:

- Stagecoach (fully functional)
- Covered wagons (2)
- Horse-drawn carriages (3 styles)
- Buckboard wagons (2)
- All vehicles maintained, inspection-certified

Stunt Features:

- Breakaway railings
- Breakaway windows (all buildings)
- Balcony falls with air bag hidden below
- Roof access for stunt work
- Padding hidden behind facades

Recent Productions:

- "Frontier Justice" (2024) - Feature film
 - "Wild West Chronicles" (TV Series, 2023-2024)
 - "Gunslingers" (2023) - Miniseries
 - "The Last Outlaw" (2022) - Feature film
- Daily Rate: \$15,000 (includes basic dressing, animal wrangler support)

Suburban Neighborhood - "Evergreen Heights"

Total Area: 5 acres

House Count: 16 complete homes (facades + functional interiors)

Era Flexibility: 1950s-present (redressable)

Street Layout:

- Two curved residential streets
- Cul-de-sac design
- Tree-lined (mature landscaping)
- Sidewalks with working street lamps
- Driveways and garages
- Front and back yards

House Styles:

1950s Ranch Style (4 houses):

- Single-story, 1,800 sq ft interiors
- Open floor plans
- Large windows
- Attached garages
- Period-accurate or modernized

1970s Colonial (4 houses):

- Two-story, 2,500 sq ft interiors
- Formal layout (living room, dining room, den, kitchen, 3 bedrooms)
- Shutters and traditional details
- Columns at entrance

1990s Contemporary (4 houses):

- Two-story, 2,200 sq ft interiors
- Great room concept

- Modern kitchens
- Master suite
- Multi-car garages

2010s Modern (4 houses):

- Clean lines, lots of glass
- Open concept
- High-end finishes
- Smart home capable
- Contemporary landscaping

Interior Features:

- Full kitchens (functional appliances)
- Bathrooms (working plumbing, 2-3 per house)
- Bedrooms (furnished)
- Living spaces (decorated)
- Basements (select houses)
- Attics (select houses)

Backyard Features:

- Patios and decks
- Swimming pools (2 houses, functional)
- Play structures
- Garden areas
- Fencing (various styles)
- Outdoor lighting

Technical Infrastructure:

- All houses have working utilities
- WiFi and internet throughout
- Phone lines (functional for props)
- Doorbells (working)
- Garage door openers
- HVAC systems

Customization Options:

- Paint colors (quick change)
- Landscaping (seasonal adjustments)
- House numbers (customizable)
- Mailboxes (personalized)
- Window treatments

- Furniture (extensive prop inventory)

Special Features:

- "Hero House": One house has four-wall construction allowing 360-degree filming

- Removable Walls: Most houses have removable wall sections for camera access

- Forced Perspective: Back of neighborhood has smaller facade houses creating depth

- Sky Backing: Green screen option for sky replacement

Neighborhood Details:

- Fire hydrants
- Street signs (customizable)
- Traffic signs
- Newspaper boxes
- Trash cans
- Basketball hoops
- Bicycles and toys (props)

Vehicles:

- Garage houses 20+ period and contemporary cars
- Vehicles can be dressed in driveways
- Picture cars available for rental

Recent Productions:

- "The Hendersons" (2018-2023) - Sitcom, used blue house
- "Suburban Secrets" (2024) - Mystery series
- "Family Ties" (2023-2024) - Drama series
- "Home for the Holidays" (2023) - TV movie

Daily Rate: \$10,000 (single house interior/exterior), \$25,000 (full neighborhood)

POST-PRODUCTION FACILITIES

Building 15 - Sound Mixing and Music Scoring

Mixing Stage 1 - "The Cathedral"

Size: 2,500 square feet

Capacity: 80 seated for screenings

Purpose: Final mix for theatrical features

Audio Specifications:

- Speaker System:

- Dolby Atmos certified (64 speakers)
- 42 surround speakers
- 12 overhead speakers
- 10 subwoofers
- Frequency response: 20Hz to 20kHz

- Mixing Console:
- Avid S6 with 64 faders
- 512 input channels
- Automation on all parameters
- Snapshot recall (unlimited)

Integration with Pro Tools HDX

Digital Audio Workstation:

- Pro Tools HDX 2024 (latest version)
- 256 channels of I/O
- 768 tracks of audio playback
- Sample rates up to 192kHz
- Bit depth up to 32-bit float

Video Playback:

- 4K HDR projector (Christie CP4325-RGB laser)
- 25-foot diagonal screen (acoustically transparent)
- Color-accurate (DCI-P3 color space)
- Supports all major video formats
- Frame-accurate synchronization with audio

Acoustics:

- Room tuned by acoustic engineers
- RT60 (reverberation time) optimized for mixing
- Acoustic treatment on all surfaces

- Floating floor (vibration isolation)
- Double-wall construction (sound isolation)
- Background noise: NC-15 (extremely quiet)

Specialized Equipment:

- ADR (Automated Dialogue Replacement) booth integrated
- Foley stage adjacent (for sound effects creation)
- Tape machine emulations for vintage sound
- Extensive plugin library (1,000+ processors)
- Stems recording capability
- Multi-format delivery (theatrical, streaming, broadcast)

Recent Mixes:

- "Chronicles of Elysium" (2024)
- "Neon Pulse" (2024)
- "Stellar Empire" (2024)

Daily Rate: \$5,000 (includes engineer, Pro Tools operator, assistant)

Mixing Stage 4 - Television and Streaming

Size: 1,200 square feet

Purpose: Fast-turnaround episodic content

Audio Specifications:

- Dolby Atmos 7.1.4 configuration
- Avid S3 mixing console
- Pro Tools HDX system
- Optimized for quick turnaround

Workflow:

- Pre-mixed stems from picture editors
- Dialog, music, and effects on separate tracks
- Rapid mix (typically 1-2 days per episode)
- Multiple format delivery (5.1, stereo, Atmos)

Typical TV Mix Schedule:

- Day 1 Morning: Dialogue mixing and cleanup
- Day 1 Afternoon: Music placement and levels
- Day 1 Evening: Sound effects and Foley
- Day 2 Morning: Overall balance and automation
- Day 2 Afternoon: Client review and notes

- Day 2 Evening: Revisions and final delivery

Recent Mixes:

- "Metro City Defenders" (all episodes)
- "Starlight Academy" (all episodes)
- "Suburban Secrets" (all episodes)

Daily Rate: \$3,000 (includes engineer and assistant)

Music Scoring Stage

Size: 3,500 square feet

Capacity: 80-piece orchestra

Purpose: Film score recording

Recording Capabilities:

- 96 microphone inputs
- Isolated recording booths (for soloists)
- Conductor video feed (sees picture while conducting)
- Click track system for tempo
- Multi-track recording (each instrument on separate track)

Acoustics:

- Variable acoustics (adjustable panels change room sound)
- Can simulate different recording environments
- Natural reverb or dead acoustic as needed

Video Integration:

- Large screen shows film to musicians
- Streamers and punches (visual cues for hit points)
- SMPTE timecode synchronization
- Real-time mix preview

Typical Scoring Session:

- 3-hour sessions (union requirement)
- Record 15-20 minutes of score per session
- Multiple takes of each cue
- Conductor chooses best take
- Immediate playback review with picture

Recent Scores:

- "Chronicles of Elysium" - Full orchestra, 90 pieces
- "Stellar Empire" - Orchestra with electronic elements
- "Heartland" - Intimate string quartet

Session Rate: \$8,000 per 3-hour session (studio only, musicians additional)

Building 22 - Color Correction and Finishing

Color Suite 1 - "The Palette"

Specialty: Theatrical features and high-end television

Display Technology:

- Reference monitor: Sony BVM-HX310 (31-inch, 4K, HDR)
- Client monitors: Multiple 65-inch OLED displays
- HDR capable: 1000+ nits peak brightness
- Color accurate: 100% DCI-P3, Rec.2020 support
- Calibrated weekly

Grading System:

- DaVinci Resolve Studio Advanced Panel
- Primary and secondary color correction
- Power windows (unlimited, trackable)
- Noise reduction and grain management
- HDR and SDR simultaneous grading
- Real-time playback up to 8K resolution

Technical Specifications:

- Storage: 2 petabytes (networked)
- Bandwidth: 100 Gbps internal network
- GPU acceleration: 4x NVIDIA RTX 6000 Ada
- RAM: 512GB for complex operations
- Supports all camera formats (RED, ARRI, Sony, etc.)

Workflow:

- Receive color-accurate dailies from DIT (Digital Imaging Technician)
- Create LUTs (Look-Up Tables) for on-set monitoring
- Initial grade in collaboration with DP
- Refinement sessions with director
- Final grade with all stakeholders
- Deliver multiple versions (theatrical, home video, streaming, broadcast)

Typical Feature Film Color Grade:

- Initial consultation: 2 hours
- Rough pass (establish look): 5-10 days
- Refinement: 5-10 days
- Final polish: 2-3 days
- Revisions: 2-5 days
- Total: 3-4 weeks for 90-minute feature

Recent Grades:

- "Chronicles of Elysium" - Fantasy look with enhanced magical elements
- "Neon Pulse" - Cyberpunk aesthetic with heavy color stylization
- "Desert Winds" - Naturalistic with warm push

Daily Rate: \$4,000 (includes colorist, assistant, suite)

Color Suite 5 - Episodic and Fast Turnaround

Specialty: Television series, commercials, music videos

System:

- DaVinci Resolve with Mini Panel
- Optimized for speed
- Template-based workflow

Turnaround Times:

- 30-second commercial: 2-4 hours
- Music video: 1-2 days
- TV episode: 1-2 days
- Corporate video: 4-8 hours

Process:

- Apply show LUT (maintains consistency across episodes)
- Balance shots (color and exposure matching)
- Creative grade on key scenes
- Client review (remote capable)
- Revisions (typically same day)

Recent Projects:

- "Metro City Defenders" (weekly episodes)
- National car commercial campaign
- 50+ music videos per year

Daily Rate: \$2,500 (includes colorist, suite)

Building 30-32 - Visual Effects Campus

VFX Department Structure:

Building 30 - Asset Creation

- 3D modeling workstations (40)
- Texture painting stations (15)
- Sculpting stations using ZBrush (20)
- Rigging department (character setup - 10 artists)

Building 31 - Animation and Simulation

- Character animation (30 animators)
- Creature animation (15 specialists)
- Dynamics simulation (cloth, hair, destruction - 12 artists)
- Fluid effects (water, smoke, fire - 8 artists)

Building 32 - Compositing and Lighting

- Compositing (Nuke - 35 artists)
- Lighting and rendering (25 artists)
- Rotoscoping and paint (20 artists)
- Tracking and matchmove (10 artists)

Total VFX Team: 220+ artists

Technical Infrastructure:

Render Farm:

- 5,000 CPU cores
- 200 GPU render nodes
- Hybrid CPU/GPU rendering
- Manages render queue automatically
- Priority system for deadline work
- Estimated capacity: 500,000 render hours per month

Storage:

- 5 petabytes total storage
- Tiered system (SSD for active projects, HDD for archive)
- Automated backup (nightly)
- Version control for all assets
- 100 Gbps network backbone

Software Suite:

- Maya (animation and modeling)
- Houdini (effects and simulation)

- ZBrush (digital sculpting)
- Substance Painter (texturing)
- Nuke (compositing)
- After Effects (motion graphics)
- Unreal Engine (real-time rendering)
- Arnold, V-Ray, Redshift (rendering engines)

VFX Workflow Example: "Chronicles of Elysium" Dragon Sequence

Phase 1: Asset Creation (4 weeks)

- Model dragon (2 weeks)
- Sculpt fine details (1 week)
- Create texture maps (4K resolution - 1 week)
- Rig for animation (1 week, overlaps with texture)

Phase 2: Animation (3 weeks)

- Block out movement (rough animation - 1 week)
- Refine animation (smooth, add details - 1 week)
- Facial animation and expressions (1 week)

Phase 3: Effects (2 weeks)

- Fire breath simulation (Houdini)
- Wing air displacement
- Ground impact dust
- Environmental interaction

Phase 4: Lighting and Rendering (2 weeks)

- Match lighting to live-action plate
- Test renders (low res to check look)
- Final renders (high res, 8 hours per frame)
- Render time: 300 frames @ 8 hours = 2,400 render hours

Phase 5: Compositing (1 week)

- Combine dragon with live-action footage
- Color matching
- Add atmospheric effects (depth haze, etc.)
- Final touches and delivery

Total Time: 12 weeks for 12.5 seconds of finished dragon footage

Recent Major VFX Projects:

- "Chronicles of Elysium" - 1,247 VFX shots
- "Stellar Empire" - 2,103 VFX shots
- "Neon Pulse" - 892 VFX shots

- "Time Jumpers" - 1,567 VFX shots

SPECIALTY FACILITIES

Underwater Stage - Building 9

Tank Dimensions: 100' long x 60' wide x 20' deep

Capacity: 750,000 gallons

Temperature Control: 75°F to 85°F

Viewing Windows:

- Four large underwater camera ports
- 10-foot wide acrylic windows
- Camera operators outside tank (dry)
- Remote camera operation also available

Safety Features:

- Safety divers on every shoot (minimum 2)
- Surface air supply for actors
- Emergency breathing equipment stations (4 locations)
- Medical oxygen on-site
- Decompression protocols for deep dives
- Water clarity monitoring
- Chemical balance tested daily

Lighting:

- Underwater lights (40 fixtures)
- Surface lights creating "sunbeams" effect
- Adjustable color temperature
- Sealed, waterproof housings
- Remote dimming capability

Tank Features:

- Adjustable floor depth (hydraulic platform)
- Wave generation system
- Current generation (simulates ocean movement)
- Green screen capability (underwater green screens)

- Bubble effects machines
- Underwater fog effects

Technical Specifications:

- Filtration system (complete water turnover every 4 hours)
- Chlorine-free (uses UV and ozone for clarity)
- Safe for prolonged exposure
- Water testing lab on-site

Typical Underwater Shoot:

- 30-45 minutes of underwater time per actor per session
- Surface intervals between dives
- Multiple takes of each action
- Slow-motion often used (cameras run at 60-120fps)
- Communication via underwater speakers
- Hand signals as backup

Actor Preparation:

- Underwater training required (provided on-site)
- Breath-hold techniques
- Emergency procedures
- Equipment familiarization
- Comfort assessment

Recent Productions:

- "Ocean's Deep" - Underwater laboratory scenes
- "Atlantis Rising" - Underwater city sequences
- "Submarine" - Interior flooding scenes
- "The Abyss 2" - Deep ocean exploration

Daily Rate: \$25,000 (includes safety divers, tank operation, basic lighting)

Virtual Production Stage - Building 40

LED Wall Specifications:

- Dimensions: 80' wide x 20' tall (curved 270-degree wrap)
- LED ceiling: 60' x 40'
- Pixel pitch: 2.3mm (very high resolution)
- Refresh rate: 7,680 Hz (no flicker at any frame rate)
- Brightness: 1,800 nits
- Color space: Rec.2020 (wide gamut)

Technology Integration:

- Camera Tracking:

- Multiple tracking systems (optical, mechanical, sensor fusion)
- Sub-millimeter accuracy
- Tracks position and lens parameters
- Real-time parallax correction
- Supports all major camera systems
- Real-Time Rendering:
- Unreal Engine 5 primary platform
- Also supports Unity, proprietary engines
- 60fps playback minimum (often 120fps)
- 4K per panel output

Color management pipeline integrated

ICVFX (In-Camera Visual Effects):

- What you see is what you get
- Background is "real" (captured in-camera)
- Reduces post-production VFX
- Actors see environment (better performances)
- Natural lighting from LED screens

Technical Support:

- Virtual production supervisor
- Unreal Engine operator
- LED wall technician
- Color scientist
- Camera tracking specialist
- IT support

Content Creation:

- Can display custom 3D environments
- Photo-realistic backgrounds
- Animated environments
- Pre-rendered content
- Live input from cameras or other sources

Workflow:

1. Environment created in Unreal Engine (or provided by client)
2. Loaded into playback system
3. Camera tracking calibrated
4. Lighting balanced (physical lights + LED wall)

5. Shoot proceeds with immediate feedback

6. Minimal post-production needed

Advantages Over Green Screen:

- Realistic reflections (in eyes, on shiny surfaces)
- Natural lighting (from environment)
- Actors see real environment
- Faster post-production
- More takes possible (no physical location limitations)

Recent Productions:

- "Stellar Empire" - Spaceship bridge with space backgrounds
- "Space Patrol" - Alien planets
- "Future City" - Futuristic cityscapes
- "Time Paradox" - Multiple time periods

Daily Rate: \$35,000 (includes LED wall, tracking, Unreal Engine operator, technical staff)

SPECIALIZED DEPARTMENTS

Costume Department - Building 18

Total Area: 15,000 square feet

Inventory: 50,000+ costume pieces

Facilities:

- Design Studio:

- 8 designer workstations
- Fabric library (10,000+ samples)
- Pattern-making tables
- Sketching and rendering area
- Construction Shop:
 - 15 industrial sewing machines
 - 3 sergers
 - Embroidery machine (computerized)
 - Leather-working tools
 - Armor fabrication area

Fabric dyeing and distressing station

Fitting Rooms:

- 6 private fitting areas
- Full-length mirrors
- Adjustable lighting

Photography setup for documentation

Storage:

- Climate-controlled (protects delicate fabrics)
- Organized by era, style, and size
- Computerized inventory system

Quick retrieval system

Laundry and Maintenance:

- Commercial washers and dryers (8 each)
- Dry cleaning capability
- Steaming and pressing
- Repair and alteration area

Costume Inventory Breakdown:

- Contemporary (2000-present): 15,000 pieces
- Period (1900-1999): 12,000 pieces
- Historical (pre-1900): 5,000 pieces
- Fantasy/Sci-Fi: 8,000 pieces
- Specialty (uniforms, cultural, etc.): 10,000 pieces

Staff:

- Costume designer (per production)
- Assistant designers (2-4)
- Costume supervisors (2)
- Stitchers/seamstresses (10)
- Shopper/buyer (2)
- Wardrobe assistants (varies by production, 5-20)

Services:

- Custom design and construction
- Period research and accuracy
- Rentals from inventory
- Fittings and alterations
- On-set wardrobe supervision
- Continuity management

Notable Costume Work:

- "Chronicles of Elysium" - 300 custom fantasy costumes
- "Neon Pulse" - 150 cyberpunk outfits with LED integration

- "Victorian Secrets" - 200 period-accurate Victorian costumes

Props Department - Building 20

Total Area: 25,000 square feet

Inventory: 100,000+ prop items

Facilities:

- Props Master Workshop:

- Woodworking area
- Metal fabrication
- 3D printing (5 printers, various sizes)
- Molding and casting
- Electronics integration
- Painting and finishing
- Props Storage:
- Organized by category (furniture, hand props, set dressing, etc.)
- Aisles like a warehouse
- Computerized inventory system

Photo database

Graphics Department:

- Design and print signage
- Create documents (newspapers, letters, etc.)
- Aging and distressing

Period-accurate typography

Weapons Armory:

- Swords, knives, guns (all props or deactivated)
- Secured storage (locked, access controlled)
- Maintenance and repair
- Safety training required

Prop Categories:

Hand Props (items actors interact with):

- Phones (contemporary and period)
- Weapons (30,000+ pieces)
- Tools
- Kitchenware
- Office supplies
- Personal items

Set Dressing (background items):

- Furniture (5,000+ pieces from all eras)
- Artwork (paintings, sculptures)
- Books (10,000+ volumes)
- Plants (artificial and some real)
- Decorative objects

Picture Vehicles:

- Cars (25 vehicles from 1920s-present)
- Motorcycles (8)
- Bicycles (40, various eras)
- Specialty vehicles (ice cream truck, police cars, etc.)

Specialty Props:

- Food (realistic fake food, some edible props)
- Money (prop currency, all denominations and countries)
- Electronics (working vintage radios, TVs, computers)
- Scientific equipment
- Medical equipment

Custom Fabrication:

Props team can create almost anything:

- Example 1: "Neon Pulse" - Created 50 futuristic handheld devices with working LED displays

- Example 2: "Chronicles of Elysium" - Designed and built ancient magical artifacts with embedded lighting effects

- Example 3: "Retro Diner" - Built 1950s jukebox that actually plays period-appropriate music

3D Printing:

- Rapid prototyping
- Create multiples of breakaway props
- Detailed small items
- Custom parts for electronics integration
- Props that would be too expensive to traditionally fabricate

Staff:

- Props master (per production)

- Assistant props masters (2-4)
- Props builders (6)
- Prop shoppers (2)
- Graphics designer (1)
- On-set props assistants (varies, 3-10)

Makeup and Hair Department - Building 17

Facilities:

- Makeup Lab:

- 20 makeup stations
- Theatrical lighting
- Individual mirrors
- Climate-controlled
- Prosthetics Workshop:
- Sculpting area
- Mold-making
- Foam latex running
- Silicone prosthetics

Painting and finishing

Hair Salon:

- 15 styling stations
- Wig construction area
- Wig inventory (2,000+ wigs)
- Facial hair inventory
- Coloring and treatment station

Special Effects Makeup:

- Capabilities:

- Aging (make actors appear older or younger)
- Injuries (cuts, bruises, blood effects)
- Creatures (aliens, fantasy beings)
- Prosthetic appliances
- Animatronic elements
- Full body makeup
- Materials:
- Foam latex
- Silicone (multiple grades)

- Gelatin (for specific effects)
- Professional makeup (all major brands)
- Blood effects (multiple types - fresh, dried, splatter)
- Special paints (alcohol-based, water-based, grease)

Process for Complex Makeups:

Example: Creating an Alien Character

- Life Cast (3-4 hours):
- Cast actor's head and body parts needed

Creates perfect replica for prosthetic sculpting

Sculpture (40-80 hours):

- Clay sculpture over life cast
- Design alien features

Client approval on sculpture

Mold Making (20-30 hours):

- Create multi-part mold

Must be precise for good fit

Foam Running (3-4 hours per piece):

- Mix foam latex
- Inject into mold
- Bake in oven

Remove from mold

Painting (4-6 hours per piece):

- Intricate paint job
- Multiple layers for realism

Seal for durability

Application on Actor (2-4 hours daily):

- Glue pieces to actor's face
- Blend edges
- Paint to match skin tones

Add final details

On-Set Maintenance:

- Touch-ups between takes
- Repair any damage

Keep actor comfortable

Removal (30-60 minutes):

- Carefully remove pieces
- Clean actor's skin
- Store prosthetics if reusable

Staff:

- Makeup department head

- Key makeup artists (3-5)
- Special effects makeup artists (2-4)
- Hair department head
- Key hair stylists (3-5)
- Makeup and hair assistants (varies, 10-30 depending on production)

Notable Work:

- "Chronicles of Elysium" - Fantasy character designs
- "Zombie Outbreak" - 100+ zombie makeups per day
- "Medieval Quest" - Period-accurate hair and makeup for 200 extras

This comprehensive technical database provides detailed specifications for Silverlight Studios' extensive facilities, from massive sound stages to specialized post-production suites, ensuring productions of any scale can be accommodated with professional-grade equipment and support.